The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 655.—Vol. XVIII. LONDON, SATURDAY, MARCH 11, 1848. [Price 6d.

Stannaries of Cornwall—In the Vice-Warden's Court.

HODGE *v.* KIRKMAN.

WHEREAS the VICE-WARDEN did, by an ORDER, or DECREE, made in the above-mentioned cause, and bearing date the 6th day of December last, Order and Decree, that a SALE be made of the ORES and HALVANS (and if necessary), the ENGINES, MACHINERY, and MATERIALS, upon and belonging to ALVIGGAN MINE, in the parishes of ST. STEPHENS, in Branwell, and ST. MEWAN, within the said Stannaries, under the direction of the Registrar of the Court, and that the proceeds of such sale should be applied by the said Registrar in the manner directed by the same Order or Decree.

Notice is hereby given, that, pursuant to the said Order or Decree, a PUBLIC AUCTION will be HOLDEN at ALVIGGAN MINE aforesaid, on Thursday, the 16th day of March inst., at Eleven o'clock in the forenoon, for selling, either together or in lots,

THE UNDERMENTIONED

MINING MACHINERY AND MATERIALS—VIZ.:

ONE 36-inch cylinder PUMPING-ENGINE, 8-feet stroke, with one boiler, about 9 tons, and 4 fathoms of iron-rod.

ONE 10½-inch cylinder STAMPING-ENGINE, with 24-heads of stamps, boiler, and two axles and frames.

Shears, iron winch, 12 10-inch pumps, working barrel, windbore, doorpiece, iron flat-rods, man engine, 15 fathoms bucket-rods, weighing machine, iron weights, smith's vice, carpenter's bench, iron and wood blocks, iron yokes, new and old tin sacks, and the whole of the ACCOUNT-HOUSE FURNITURE.

For viewing the same, application may be made to Mr. M. Teague, on the mine; and for further particulars (if by letter, pre-paid), to Mr. H. S. Stokes, solicitor, Truro.

Dated Registrar's Office, March 2, 1848.

Stannaries of Cornwall—In the Vice-Warden's Court.

HILL *v.* VIGERS.

IN RE POLBEROU,

OTHERWISE SAINT AGNES CONSOLIDATED MINES.

NOTICE IS HEREBY GIVEN, that the SALE of the ENGINES, MACHINERY, MATERIALS, and EFFECTS upon and belonging to the above-mentioned MINES, is POSTPONED until the month of APRIL next.

HODGE & HOCKIN,
For GRYLLS & HILL, Solicitors, Helston.

Dated Registrar's Office, Truro, March 1, 1848.

EXTENSIVE IRON-WORKS.—FOR SALE, BY PRIVATE BARGAIN, the BLAIR IRON-WORKS, belonging to the Ayrshire Iron Company, situated in the parish of Dairy, and county of Ayr.

These works, which have been recently erected at an immense cost, consist of two blowing-engines, five blast-furnaces, workmen's houses, steam-engines for working the minerals, together with utensils at the pits, furnaces, &c., all in working order, and capable of producing upwards of 35,000 tons of pig-iron per annum.

One of the blowing engines, high-pressure, estimated at 90-horse power, was erected in 1841; the other, a condensing engine, was erected in 1847, and is estimated at 200-horse power, the latter being capable of blowing five furnaces, and both fitted up in the most substantial manner, and at present in the best working condition.

The furnaces have been erected with the greatest care, and are fitted with air-heating apparatus of the most approved construction. The make of each furnace has generally averaged upwards of 150 tons of iron per week, and some of them have produced 180.

There are, besides the manager's house and store buildings, 187 workmen's houses, in a habitable state, attached to the furnaces and pits, and there are 20 partly built, which could be finished at a small additional outlay. There are also a new foundry, wright shop, fire-brick work, smithy, &c.

The MINERAL FIELDS, consist of COAL, IRONSTONE, LIMESTONE, and FIRE-CLAY, held in lease, by the company, at moderate fixed rents and Royalties, all situated within easy distances of the furnaces, and for the most part have the advantage of railway communication.

The COAL-FIELDS consist of several hundred acres, of which only a small portion has been wrought. Several pits, fitted with good engines and machinery, are sunk to the coal, and partly in operation.

The IRONSTONE consists of the well-known black-band, yielding about 3000 tons of calcined stone per acre; and it has been estimated that there are 300 acres or thereby still to work—besides which, there is a large extent of clay-band ironstone, hitherto little wrought, but capable of yielding a large output. There are 15 pits, with excellent steam-engines—some of them in present operation, and others ready to resume working.

The LIMESTONE QUARRY is worked by open cast, and is connected with the works by railway.

The FIRECLAY is abundant, of excellent quality, and cheaply produced.

The Glasgow, Paisley, Kilmarnock, and Ayr Railway (extending to Carlisle), passes close to, and has connection with, the furnaces—by means of which, and others in connection with it, the produce can be conveyed to the city and port of Glasgow (32 miles off), and to the seaports on the Ayrshire coast, each within a few miles of the works.

There is a large stock of calcined ironstone, coal, and limestone on the ground, so that the works may be put into immediate operation, and, under judicious management, the manufacture of pig-iron may be carried on to the greatest advantage. The concern will be found to be well worth the attention of persons having the requisite capital, and affords an opportunity of entering into the business seldom to be met with.

MALLEABLE IRON-WORKS.—Considerable progress has been made in the erection of extensive malleable works, which, when completed, will be capable of turning out 300 tons of bar-iron weekly. The most of the necessary machinery has been prepared by the contractors; and a portion of the work could be brought into operation in a few months to produce the half of the above estimate. This work is nearly adjoining the Pig Iron-Works, and connected by railway, and will be sold either together therewith or separately.

Plans of the property and mineral workings lie for inspection at the Ayrshire Iron Co.'s office, 113, St. Vincent-street, Glasgow, where, on application to Mr. Brown, every necessary information will be afforded, and orders given for inspection of the works.

RENFREWSHIRE, SCOTLAND.—Valuable MINERALS on the ESTATE of CASTLESEMPLE TO BE LET.—This estate, which is situated in the parishes of LOCHWINNOCH and KILBARCHAN, and county of RENFREW, extends over a surface of upwards of 5000 acres, and the MINERALS consist of

COAL, LIMESTONE, IRONSTONE, AND COPPER ORE.

COAL.—The coal, so far as has hitherto been proved, is found to be of good quality. The field is supposed to stretch along the line of the Ayrshire Railway, and to train round, in a semicircular form, by the village of Lochwinnoch, near the parish church, at the western extremity of the lake. From the vicinity of so many extensive iron-works and manufactories, as well as from the local wants of the district, and the immediate vicinity of the populous village of Lochwinnoch, coal is in great request.

LIMESTONE.—The carboniferous limestone has been found on various points of the property, and is supposed to be of good quality, and easily workable. As usual, it is found under the coal beds. It is in good demand in the district.

IRONSTONE.—The ironstones are both of the clay-band and black-band species, but sufficient trials have not been made to ascertain their value. It is probable, however, from the strata being in the immediate neighbourhood of the well-known Ayrshire Black-band Ironstone, and lying in the same direction, that they may turn out, on farther trials, to be valuable.

COPPER ORES.—These are supposed to be of excellent quality. Some works have already been commenced in the neighbourhood; and it is understood that the veins of copper which have been found in the adjoining property of Kaim, are continued into the Castlesemple Estate, where the lands of High Barnaigh (part of the Castlesemple Estate) adjoin to Kaim. The greater part of the ore which has been hitherto found, is understood to show from 50 to 60 per cent. of copper.

The Castlesemple Estates are situated about 15 miles west from Glasgow, and 8 from Paisley, and surround the town of Lochwinnoch, where there is a station of the Ayrshire Railway. The proprietor is ready to entertain offers for a lease of the whole, or any of the above minerals.

Further particulars will be learned on application to the proprietor, Lieut.-Colonel James Harvey, of Castlesemple, No. 10, Picardy-place, Edinburgh; Mr. David Ballingall, factor, Castlesemple; or Messrs. Shand and Farquhar, Writers to the Signet, No. 24, Queen-street, Edinburgh.

VALUABLE SEA-SALE COLLIERIES TO BE LET.—TO BE LET, and entered upon on the 1st of July next, the valuable current-working COLLIERIES of EVENWOOD and NORWOOD, in the county of Durham.

These collieries are situated upon the line of the Stockton and Darlington Railway, by which the coals are conveyed to the shipping ports of Stockton and Middlesborough; and also, by means of this, and the York and Newcastle, and Leeds and Thirsk Railways, the coals have access to the important land-sale trade of Northallerton, Thirsk, Ripon, York, the lead-mining districts, and other towns in Yorkshire, and for shipment on the Ouse; and, by means of the proposed Northern Counties Union Railway, with the important land-sale trade of the western parts of Yorkshire and Westmoreland.

The royalties are very extensive. Two seams of coal are in working—one upwards of 6 feet, and the other of 3 feet. The pits are at a moderate depth from the surface, and the coal is worked at an exceedingly cheap rate, and is much prized as a household coal, both for export and land-sale.

The entering tenant has the option of taking what stock he may require, at a valuation; and the amount of capital required to enter upon the collieries will be of very small amount.

For particulars apply to Thomas Wheldon, Esq., Barnard Castle; or to Nicholas Wood, Esq., Newcastle-upon-Tyne.—Newcastle, March 3, 1848.

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £8 to £16 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each.

DENT'S PATENT DIPLIEDOSCOPE, or meridian instrument, is now ready for delivery. Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

STEAM-ENGINES ON SALE.

No. 1. A Second-hand double power CONDENSING MARINE ENGINE, with cast-iron framing and side beams; cylinder 31 inches diameter, 3 feet stroke; air-pump, lined with brass, no boiler, 47-horse power, with 7 lbs. pressure on the square inch, and very suitable for pumping and winding in a colliery, lead mine, or to drive any kind of mill-work.

2. A double power CONDENSING MARINE ENGINE, quite new, but unfinished, with cast-iron framing and side beams; cylinder 43 inches diameter, 3½ feet stroke, 91-horse power, with 7 lbs. pressure on the square inch; no boiler, and suitable for the same purposes as No. 1.

3. A double power CONDENSING LAND BEAM WINDING ENGINE, cylinder 22 inches diameter, 4½ feet stroke, hand gear, with button valves, parallel motion, fly-wheel, waggon boiler, with all its fittings, door, grate, dead plate, &c.; two large cast-iron bell cranks and pedestals, with strong wrought-iron connecting-rods, for pumping water from two lifts of pumps, 100 yards deep; two rope wheels, suited for flat chains, apparatus to throw in and out of gear, pit-head palleys, &c.; 23-horse power, with 7 lbs. pressure on the square inch, and suitable for the same purposes as No. 1.

4. A new direct action NON-CONDENSING ENGINE, double power, suitable for a a corn-mill, or winding in a coal or lead mine, with improved spring packing for piston; ditto ditto, for nozzle valves; cylinder 15 inches diameter, 3½ feet stroke, 28-horse power, with 30 lbs. pressure on the square inch—no boiler.

5. A double power NON-CONDENSING LAND BEAM ENGINE, cylinder 20½ inches diameter, 4 feet stroke, slide valve, parallel motion, no boiler, and quite new; 52-horse power, with 30 lbs. pressure on the square inch, and suitable for the same purposes as No. 1.

6. A double power NON-CONDENSING BEAM WINDING ENGINE, cylinder 15½ inches diameter, 3½ feet stroke, with a cast-iron portable frame, slide-valve, hand gear, parallel motion, flat-rope wheel, spur and pinion wheels for the same; 29-horse power, with 30 lbs. pressure on the square inch, no boiler, and suitable for the same purposes as No. 1.

7. A second-hand PUMPING ENGINE, with cylinder 48 inches diameter, 7 feet stroke in the house, and the same in the pit, with air-pump condenser, hand gear, cistern, &c., pumping three lifts of pumps 100 yards, working barrels, 14 inches diameter; no boiler, 113-horse power, with 7 lbs. pressure on the square inch.

8. A new direct action NON-CONDENSING DOUBLE POWER ENGINE, 7-horse power, with a pressure of 30 lbs. on the square inch. This engine takes very little room.

One pair of MARINE BOILERS, newly repaired, suitable for a pair of 45 to 50-horse power engines.

New BOILERS, of any shape, can be made at a short notice, to suit any of the above engines.—For further information, apply to EYTON & CO.,
Mostyn Foundry, near Holywell, Flintshire.

VALUABLE PUMPING AND WINDING ENGINES FOR SALE.—TO BE SOLD, BY PRIVATE CONTRACT, at WHEAL VOR MINE, in the parish of BREAGE, CORNWALL—

1 80-inch DRAUGHT ENGINE, 10-feet stroke in cylinder, and 8 feet in shaft, main beam and caps, top nozzle, spring piston and rod—all new this year; with four boilers, of 12 tons each, in excellent repair.
1 80-inch DITTO, 10 feet stroke in cylinder, 7½ feet in shaft, cylinder, piston, bottom and cover, nearly new, with two boilers, of 12 tons each, and three boilers, of 10 tons each, all lately thoroughly repaired.
1 49-inch DITTO, 9 feet stroke in cylinder, and 7 feet in shaft, without boilers.
1 20-inch WINDING ENGINE, 5 feet stroke, with two boilers, of 4 and 6 tons, and vertical cage, all in complete repair—the boilers and some other parts nearly new.
1 18-inch DITTO, 4 ft. stroke, with one boiler, of 3 tons, and horizontal cage, complete.
Several TONS of straight and turned STEAM-PIPES.
12-head CAST-IRON STAMPS AXLES, with bearings, oak frames, &c., complete.
A powerful WEIGHING MACHINE, nearly new, comprising every requisite.
An immense number of PUMPS, matching-pieces and windbores, 12 to 17-inch bore, with working barrels, doorpieces, H-pieces, cases, with stuffing-boxes and glands to match, from 11 to 19 inches bore, and plunger-poles, from 12 to 19 diameter.
Faggotted rod and cap plates, 6, 7, and 8 inches wide, staples and glands, overrunners, caps, saddles, troughs and gudgeons for balance and other bobs.

Application to be made to Capt. R. Blight, jun., on the mine.
Dated Nov. 29, 1847.
N.B.—The above are of easy transit to Hayle wharfs, and from thence on ship-board, if required.

EAST WHEAL FRIENDSHIP MINING COMPANY, ADJOINING OLD WHEAL FRIENDSHIP.

TO BE WORKED ON THE "COST-BOOK" PRINCIPLE.

REPORT OF J. H. HITCHINS, ESQ., OF THE DEVON GREAT CONSOLS.

In viewing the sett generally, I have only to remark, that I consider it one possessing advantages of more than ordinary character; and, as a mining investment, as good as any can be. The lode at present in the adit end, now driving east of the River Tavy, being the large masterly one of Wheal Friendship Mines, which has proved so profitable to the adventurers—from 4 to 5 feet wide, intermixed throughout with gossan, mundic, copper, peach, prian, and all the other characteristics comprised in the term "kindly."

Application for the remaining shares, or further particulars, apply at the office of the company, 48, Threadneedle-street; or of Mr. James Lane, 75, Old Broad-street.

CORNWALL NEW MINING COMPANY.

Capital £100,000, divided into 20,000 shares, of £5 each.
(With power to be increased.)

To be Incorporated, in pursuance of the statute of 7 and 8 Vic., cap. 110—by which the responsibility of each shareholder is limited.

Deposit 20s. per share.

Not to be Paid until the Company is completely Registered and Incorporated.

The CORNWALL NEW MINING COMPANY is ESTABLISHED to WORK a SERIES of TIN and COPPER MINES, chiefly in the district of ST. IVES, which has hitherto afforded a larger profit on its return of ore than any other part of the county.

In pursuance of this plan, five of this description have been already selected—viz.: Georgia Tin Mines, Trewortha Tin and Copper Mine, Bray Tin and Copper Mine, Trevarno Tin and Copper Mine, and Wheal Squire Tin and Copper Mine, with whose owners the committee have been enabled to make such advantageous arrangements, as to enable them to work one or more with even a small portion of the proposed capital.

These mines are not only known to contain mineral ores of immense value, but the workings are already so far advanced, that the lodes ascertained and reached must produce early and large returns; and, in addition to the above, there are others which the committee have secured on sufficient public support being obtained.

With a view of inducing the public generally to avail themselves of such a beneficial employment of their capital, the committee have made the shares £5, and of which only £2 10s. is to be paid within 18 months—limiting further calls to the control of the subscribers themselves, and to be made only when a dividend shall have been declared.

Applications for shares to be made, in the usual form, at the offices of the company, 17, Essex-street, Strand; and to the following brokers and agents, of whom detailed prospectuses may be obtained:—Messrs. G. and T. Irvine, Liverpool; Messrs. Cardwell and Sons, Manchester; Messrs. J. Scott and Son, Birmingham; Messrs. Rhodes and Hayes, Leeds; Messrs. Brady and Co., Hull; Mr. Joseph Clarke, jun., Southampton; Mr. Chas. Claye, Halifax; Messrs. William and Charles Skardon, Plymouth; Messrs. W. Moore and Co., Huddersfield; Mr. Thomas Dewhirst, Bradford; Mr. Henry Vatcher, Exeter.—Prospectuses can also be had at the office of the *Mining Journal*, 26, Fleet-street, London.

Office, 17, Essex-street, Strand. GEORGE LOCKWOOD, Secretary.

DYFNGWM LEAD MINE.—At an Adjourned Meeting of parties interested in the Dyfngwm Lead Mine, held on the 28th Feb., 1848, at the London Tavern, W. W. TAYLOR, Esq., in the chair,

The minutes of the proceedings of the last meeting, held on the 24th inst., were read; as also the report, since received, from the manager of the Rhoswiddol Lead Mines—whereupon the following resolutions were carried unanimously:—

That the offer of the present proprietors to transfer to trustees the lease of the mines, together with the gear, machinery, &c., belonging thereto, upon the following terms—viz.: That the extended company shall consist of 3000 adventures, or shares, of the value of £10 each, of which 2500 (to be considered as paid up in full) shall be appropriated to the present proprietors for the purchase of the lease, machinery, gear, &c., and the remaining 500 adventures, or shares, to be immediately issued upon the following conditions:—£1 per adventure, or share, to be paid on the appropriation thereof, and for the purpose of extending the working of the mines. The remaining £9 to be paid by monthly instalments of 10s. per adventure, or share, until the whole shall have been paid up; the proceeds of these 500 shares to be expended upon the mines, pursuant to the plan proposed in the report, now read and approved, with such alterations as may from time to time appear advisable to the adventurers—the mines being worked upon the "Cost-book" Principle.

That an early meeting of the adventurers be called, when the rules and regulations for managing the concern, upon the Cost-book System, will be considered and determined upon. W. T. TAYLOR, Chairman.

Resolved,—That the cordial thanks of the meeting be given to the chairman, for his conduct in the chair, and the zeal manifested by him in promoting the objects of the adventurers. G. HADLEY, Purser.

37, Royal Exchange, Feb. 29, 1848.

SILVER VALLEY MINING COMPANY.—At a Special General Meeting of shareholders in the above company, held at the offices of the company, 44, Finsbury-square, on Friday, the 3d day of March, 1848, it was

Resolved,—That it is the opinion of the shareholders now present, with reference to the reports of the agents of this company, and the circumstances mentioned at this meeting, that the further prosecution of these mines be discontinued, and that this company be dissolved, and that the directors be authorised and empowered to sell the setts, machinery, ores, and effects, belonging to this company, by public sale, or private contract.—Carried unanimously.

Resolved,—That the thanks of the shareholders be presented to the chairman and directors, for their careful and able management of the company's affairs.—Carried unanimously.

BLAENGWAWR STEAM COAL, CARDIFF.—ORDERS for the BLAENGWAWR STEAM COAL RECEIVED by Mr. W. F. STANTON 9, Love-lane, Eastcheap; or by Mr. George Sully, agent, 1, Bute-street, Cardiff, Glamorganshire, South Wales.

COLLIERY.—WANTED, a Gentleman of CAPITAL, to JOIN the ADVERTISER in OPENING a COLLIERY, which, for position and quality of mines, possesses advantages seldom to be met with.—Apply to E. W. Binney, solicitor, 40, Cross-street, Manchester.

WANTED, a SITUATION as VIEWER.—The advertiser has had considerable experience in the working of collieries in South Wales and the north of England, and could produce testimonials as to ability, &c.—Address "A. B.," Post-office, Hetton-le-Hole, Durham.

FOR SALE, BY PRIVATE CONTRACT—A single-acting PUMPING-ENGINE—cylinder 30-inch diameter, 9-feet stroke, equal beam, with 7-ton boiler, cisterns, spring beam, and first set of rod-shafts attached, being the engine of Wheal St. Cleer.—For particulars, apply to Capt. Osborne, Liskeard; Mr. West, engineer, St. Blazey; or Mr. Rendle, the purser, 13, Octagon, Plymouth.

FOR SALE—A THIRD PART in one of the most promising MINES in WALES—situated within a mile of water carriage, and advantageously located for the working by water-power. The lodes have been partially worked, yielding large returns of lead ore, and are laid open to a great extent—presenting the most favourable appearances, with large quantities of barytes, from which immediate returns may be made.—For price and particulars, address "X.," care of Mr. Ward, accountant, 26, Nicholas-lane, City.

TO CAPITALISTS and PARTIES ENGAGED in COPPER, LEAD, and TIN MINES.—Mr. HIRAM WILLIAMS, Mining Engineer, is prepared to TREAT with individuals for the USE of a PATENT that will ensure LARGER PROFITS than any hitherto realised from mineral operations in this country.

Mr. Williams may be consulted on the subject any day at his offices, No. 61, Moorgate-street, City.

TO ENGINEERS AND IRONFOUNDERS.—PERLBACH'S PATENT PROCESS OF UNITING METALS AND ALLOYS,

Described in the *Mining Journal*, No. 649, will be found very useful for STRENGTHENING IRON CASTINGS, by inserting bars, or pieces, of wrought-iron; and for UNITING CAST-IRON with COPPER, STEEL, GUN METAL, BRASS, and OTHER ALLOYS.—For LICENSES and particulars, apply to Mr. C. A. PRELLER,
31, Abchurch-lane, London.

MR. JAMES STRIDE, PARLIAMENTARY AGENT, begs to announce, that he has COMMENCED BUSINESS as MINING, SHARE, ESTATE, and GENERAL AGENT. He has ON SALE, SHARES in the best DIVIDEND-PAYING and other MINES. The earliest and most authentic information, and the full benefit of the market value, afforded to buyers and sellers of mining and other property. MINES INSPECTED AND REPORTED ON.

London, 35, Charing-cross.

MR. R. TREDINNICK, THREE KING'S COURT, *LOMBARD-STREET, LONDON,*

Continues to DEAL in every description of MINING, RAILWAY, BANKING, INSURANCE, CANAL, and OTHER SHARES.—Statistical information afforded gratuitously, upon personal application.—MONEY ADVANCED upon the above securities.

JAMES LANE, MINING SHARE DEALER, *75, OLD BROAD-STREET, LONDON.*

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

BRITISH MINING OFFICES—NOTICE.—The BUSINESS of these OFFICES will henceforth BE CONDUCTED at No. 28, FLEET-STREET, LONDON, and No. 4, STAMP-OFFICE BUILDINGS, MANCHESTER, to either of which offices communications are requested to be addressed. The correspondence and reports, with the accounts, of the respective companies may be inspected at all times, on application. WILLIAM SHEARMAN,
British Mining Offices, Feb. 17, 1848. JAMES TRUSCOTT.

MONEY.—MESSRS. KILLICK & CO. (late WINSTANLEY, KILLICK, & Co.), SHAREBROKERS, inform their friends and the public, they make IMMEDIATE ADVANCES, to any amount, on the deposit of English and Foreign Railway Shares, Scrip, and Debentures, upon exceedingly advantageous terms: they also BUY and SELL every description of STOCK and MINING SHARES, at much less commission than usually charged.

6, Bank Chambers, opposite the Bank of England.

ALTEN MINING ASSOCIATION.—Notice is hereby given that a DIVIDEND of FIVE SHILLINGS per share will be PAYABLE at the office of the association, on Monday, the 13th day of March inst., and every other day in that week, and on Wednesday in every week following, between the hours of Eleven and Three o'clock.—The scrip certificates, on which the dividend is claimed, must be left at the office two clear days before the payment can be made.

By order of the board, EDWARD J. COLE, Secretary.
Winchester-house, March 9, 1848.

ASTURIAN MINING COMPANY.—Notice is hereby given, that the FOLLOWING SHARES in this company, on which the calls, due on the 4th of December and 4th of January last, have not been paid, will be declared FORFEITED, and confiscated for the benefit of the company, for non-payment of calls, unless such calls, with interest, be paid on or before the 21st day of March inst.:—

Nos.	11	to 20	inclusive		
Nos.	31	to 80	"		
Nos.	111	to 120	"		
Nos.	121	to 160	"		
Nos.	231	to 240	"		
Nos.	321	to 325	"		
Nos.	391	to 400	"		
Nos.	401	to 403	"		
Nos.	407	to 412	"		
Nos.	441	to 450	"		
Nos.	451	to 460	"		
Nos.	521	to 530	"		
Nos.	571	to 650	"		
Nos.	756	to 760	"		
Nos.	766	to 768	"		
No.	770				
Nos.	772	to 775	"		
Nos.	801	to 810	"		
Nos.	831	to 850	"		
Nos.	931	to 965	"		
Nos.	1051	to 1090	"		
Nos.	1316	to 1320	"		
Nos.	1406	to 1420	"		
Nos.	1621	to 1660	"		
Nos.	2906	to 2915	"		
Nos.	3021	to 3025	"		
Nos.	3101	to 3105	"		
Nos.	3111	to 3115	"		
Nos.	3131	to 3135	"		
Nos.	3216	to 3225	"		
Nos.	3271	to 3300	"		
Nos.	3406	to 3415	"		
Nos.	3561	to 3570	"		
Nos.	3576	to 3580	inclusive		
Nos.	3766	to 3770	"		
Nos.	3861	to 3865	"		
Nos.	3806	to 3840	"		
Nos.	3866	to 3885	"		
Nos.	3941	to 3950	"		
Nos.	4231	to 4250	"		
Nos.	4306	to 4355	"		
Nos.	4391	to 4395	"		
Nos.	4401	to 4405	"		
Nos.	4406	to 4410	"		
Nos.	4671	to 4750	"		
Nos.	4946	to 4950	"		
Nos.	5101	to 5200	"		
Nos.	5316	to 5320	"		
Nos.	6291	to 6315	"		
Nos.	6461	to 6470	"		
Nos.	6471	to 6510	"		
Nos.	6811	to 6830	"		
Nos.	7211	to 7275	"		
Nos.	7336	to 7340	"		
Nos.	7466	to 7505	"		
Nos.	7586	to 7595	"		
Nos.	7686	to 7785	"		
Nos.	8216	to 8235	"		
Nos.	8251	to 8260	"		
Nos.	8311	to 8320	"		
Nos.	8771	to 8775	"		
Nos.	9686	to 9755	"		
Nos.	9846	to 9850	"		
Nos.	10451	to 10500	"		
Nos.	10676	to 10840	"		
Nos.	11251	to 11270	"		

By order of the board, K. MACKENZIE, Secretary.
Offices of the company, 9, Austinfriars, London, March 7, 1848.

OFFICE OF THE GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND, Castle Baynard, 13, Upper Thames-street, London, March 9, 1848.—GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND.—The Holders of the Debentures of this company are particularly requested to ATTEND at an ADJOURNED MEETING, to be held at this office on Monday, the 20th inst., at Two o'clock precisely. By order of the Court of Assistants,
E. YOUNGER, Sec. pro tem.

ADCOCK'S PATENT SPRAY PUMP.—This important INVENTION having been PERFECTED, and brought into SUCCESSFUL PRACTICAL OPERATION, the PATENTEE is ready to RECEIVE, and to execute, ORDERS.—Apply to Henry Adcock, C.E., at his offices, No. 2, Moorgate-street, London, where pamphlets, descriptive of the invention, may be had; at the office of the *Mining Journal*, 26, Fleet-street; and through any respectable bookseller—price 6d.

PATENT GALVANISED IRON AND WIRE ROPE WORKS, *MILLWALL, POPLAR.*

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the only proved process for galvanising wire rope, adding only £10 per ton instead of £30, under the ordinary processes. The rope is extensively used in damp situations for hoisting and mineral purposes, and for ships' standing rigging.

SIR JAMES MURRAY'S FLUID MAGNESIA.—Prepared under the immediate care of the inventor, and established for upwards of 30 years. This elegant preparation is recommended in all cases of bile, acidities, indigestion, gout and gravel, as the most safe, easy, and effectual form in which magnesia may—and, indeed, the only one in which it ought—to be exhibited, possessing all the properties of the magnesia now in general use, without being liable, like it, to form dangerous concretions in the bowels, it effectually cures HEARTBURN without injuring the coats of the stomach, as soda, potass, and their carbonates are known to do; it prevents the food of infants turning sour; in all cases it acts as a pleasing aperient, and is peculiarly adapted to females. It has long been known that the most serious consequences have frequently resulted from the use of solid magnesia, which has been proved by Mr. Brande and many other eminent chemists, to form concretions in the bowels, endangering, and, in some instances, destroying life.—Sir HUMPHREY DAVY testified that this solution forms soluble combinations with uric acid salts in cases of gout and gravel—thereby counteracting their injurious tendency, when other alkalies, and even magnesia itself, had failed.

From Sir PHILIP CRAMPTON, Bart., Surgeon-General to the Army in Ireland:—"DEAR SIR,—There can be no doubt that magnesia may be administered more safely in the form of a concentrated solution than in substance; for this, and many other reasons, I am of opinion that the fluid magnesia is a *very valuable* addition to our Materia Medica.—PHILIP CRAMPTON."—Sir J. Clarke, Sir A. Cooper, Dr. Bright, and Messrs. Guthrie, and Herbert Mayo, of London, strongly recommend Murray's Fluid Magnesia, as being infinitely more safe and convenient than the solid, and free from the danger attending the constant use of *soda or potass*. 31

Letter from J. Murray, Esq., Lecturer on Chemistry, F.S.A., F.L.S.:—"DEAR SIR JAMES,—Many years have elapsed since you first showed me, in your laboratories, your super-carbonate, or soluble magnesia, and demonstrated experimentally the remarkable quantity of pure magnesia held in transparent solution. It was then new to me, as it was to the chemical world, and I speak advisedly, as a practical chemist. I believe its medical value cannot be too highly estimated; and I am satisfied that the public is under an infinite debt of gratitude to you for those invaluable researches, which have been the means of its introduction. Not to mention its more obvious healing virtues, I believe it to be almost, if not altogether, a specific for lithic acid concretions, when used in the pure condensed solution invented by you.

'Believe me to be your's, faithfully, JOHN MURRAY, F.S.A.

"To Sir James Murray, Dublin. Portland-place, Hull, Aug. 30, 1839."

The following testimonial of the celebrated "Distin Family," who are well known to her Majesty and the nobility of England proves the great value of Sir James Murray's fluid magnesia, and is very encouraging for delicate persons going to sea:—

"SIR,—Having arrived from Glasgow, per the steam-ship *Jupiter*, in this stormy season, without the slightest sea sickness, we feel bound to attribute this exemption to the most agreeable *effervescent draughts* of your solution of magnesia and acidulated syrup, which were kindly furnished to us by that attentive officer, Capt. Ellis. Upon all former occasions we were martyrs to sea sickness, and we think it a great blessing that travellers may now enjoy such health and comfort at sea, as we derived from the use of this *delightful drink*.

"To Sir J. Murray. Tuthill's Hotel, Dawson-street, Dublin, Feb. 19, 1839. "THE DISTIN FAMILY.

From Dr. KENNEDY, Master of the Lying-in Hospital, Dublin:—

"DEAR SIR,—I consider the fluid magnesia to be a *very valuable* and *convenient* remedy in cases of irritation or acidity of the stomach, but more particularly during pregnancy, febrile complaints, infantile diseases, or sea sickness."

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CAUTION.—In order to avoid the danger of concretions and sediments, which result from the use of over-saturated and unchemical compounds, made by non-medical persons, the public will please to observe, that Sir James Murray's pure fluid magnesia is prepared of that proportion of strength which is conformable to the laws of chemical equivalents, and which has been proved, in hospital and private practice, during the last 30 years, to be the best adapted for the human stomach, and the most suitable for the treatment of females and children.

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THE VENTILOMETER.

Last week Mr. Schmidt, of Sutton-street, Waterloo-bridge, accompanied by Mr. Rosalgni, secretary of the possessor of the ventilometer, had the honour of placing in the barge of Admiral Beaufort, by official invitation of the Lords Commissioners, the remarkable instrument bearing the above name. The ventilometer is the invention of a French naval officer, in command at La Rochelle, where the instrument has been tried, during four years, with singularly true results; and the observations that Mr. Schmidt has made during the few weeks it has been in this country, justified him in presenting it to the notice of the Admiralty and of Lloyd's, as a most valuable marine instrument, whereby the crews and ships stationed off the coasts may often be saved—the officers having several hours' notice, and knowing when to run out to sea or into harbour.

The instrument itself, exteriorly, exactly resembles a mariner's compass; and, having been fixed true north, the needle will take up its position, and whatever point it designates, that wind will arrive in the 24 hours, but generally within the 12 to 18 hours; according to the time that the needle remains at such point, so long will the wind blow from that quarter; and according to the inclination of the needle from its horizontal and natural position, so will be the violence of the wind. The principle upon which the ventilometer has been constructed seems very simple and feasible.

The magno-electric fluids surround our globe, and their direct action is visible in the workings of the mariner's compass. Winds being the result of electrical changes, are produced by a disturbance in these fluids, and continue until the exact equilibrium is obtained; neither do these winds burst forth immediately over our heads, but take their origin within a circle of immense circumference—taking our own position as the centre. Any undue action in any part of the fluids within this circumference, will have more or less influence upon the whole; but our ordinary senses cannot mark these changes, although we sometimes find *nervous* invalids remarkably sympathetic, and able to fortell what the healthy man cannot—yet, when the change does arrive, a few hours afterwards he is obliged to admit his own grosser senses. If we throw a stone into the centre of still water, the undulations will extend in succession, until lost to view to the unpractised eye, although still going on.

If we admit these premises, which are those ordinarily received, then there only remains to find an instrument sufficiently delicate to indicate those changes that our senses cannot appreciate, although actually surrounding us. The delicate mechanism of the ventilometer does this; it forms itself into the centre of a certain undefined circumference, but the extent of whose influence does not exceed a space of 24 hours; any change taking place within this circle is notified—so that, suppose the vane to be pointing north, but that the ventilometer at the same moment points to south, then, within the 24 hours, *most certainly*, the south wind will blow; but the ordinary change is from 12 to 18 hours, and should the ventilometer remain for hours, or days, at the same point, the same wind will continue blowing; but when it changes within the 24 hours, the wind will change also. This instrument is not influenced by the lighter breezes; when a strong wind blows, the needle, or indicator, is horizontal—but as the winds, or atmospheric changes, gradually increase in violence, the point is elevated by the weight of the atmosphere, and thus not merely preindicates the wind that is to blow, but its exact strength and duration. If the principle be proved to be correct, then, possibly, improvements may be made, by which even the lightest breezes may be preindicated. The present ventilometer is comparatively of rough workmanship, having been constructed by a naval officer, without any other aid than the simplest tools.

We shall certainly not lose sight of this interesting trial, and we will endeavour to present our readers with a copy of the observations and the workings; but, in the meantime, we are sure that Mr. Schmidt will be happy to give any additional information on this subject to the scientific or practical inquirer.

SNYDER'S PATENT LEATHER COMPANY.

A company has just been formed, for carrying out an important improvement in the manufacture of leather, which, judging from the prospectus, and the opinions of practical men, promises to be a very successful and profitable undertaking, as well as to benefit every consumer of that extensively necessary article. Scarcely any of the useful arts have received less improvement than that of tanning, though it is one of the oldest that mankind has practised; the great difficulty to be overcome, being the resistance of the skin to the penetration of the tan liquor. In the ordinary method, and far more in all the quicker processes hitherto attempted, the surface becomes over-tanned, harsh, and brittle, before the interior is tanned at all; hence an inferior article, and a great loss of time, and waste of material.

All practical tanners, well acquainted with their art, deplore this—as illustrative of which, we cite the following extracts from some lectures, by the Hon. Gideon Lee, of New York, delivered at the request of his fellow-townsmen, engaged in the business. The Hon. G. Lee had been upwards of 40 years successfully engaged in the trade, and took this occasion to make known the result of his experience. The lectures have since been published. He says—"The worth and wear of leather is always in mathematical or approximate ratio of increased weight. Much of the original gelatine is never combined with the tannin, but is wasted, actually extinguished, or incapacitated, or perhaps both, in the process of manufacture, and chiefly by the tardiness of the process; for I have not a doubt, that, if it were possible to bring every particle of the hide, the moment it is prepared for the handler, into conjunction with the tannin, as the chemists are able to do with their solution of both, the result would give nearly 200 lbs. (probably, 180 lbs.) of leather, from 100 lbs. of perfectly dried hide,* when cleansed of all extraneous appendages. But this being impracticable—as we must retain the original organic form of the hide, in order to make leather of it—it becomes our proper business to devise and adopt such saving modes of process as will waste the least and save the greatest quantity of the gelatine substance of the hide. The interior parts chiefly suffer from this disqualification; for, the exterior being brought into immediate contact with the tannin, the two surfaces are always tanned first, as every body knows. It is somewhat curious to see the process of the combination extending from the two surfaces inward—the interior remaining colourless, soft, raw hide, for a long while after the two surfaces have become firm well-tanned leather. It is very clear, at first sight, why it should be so; indeed, we almost wonder how the interior of a thick hide gets tanned at all."

The method patented by Mr. Snyder, and which the company proposes to carry out, completely fulfils this great desideratum, by an exceedingly simple means; it consists in making a large number of very fine punctures through the skin, at the time when prepared for the tan liquor, and in its most flaccid condition. The tanning thus comes immediately in contact with the interior substance of the skin, and it is thus equally tanned throughout, in half the usual time, and a very superior article produced; the punctures heal perfectly—so that, except on the cuticle, or grain, side, no traces of them can be seen even by the help of the most powerful magnifier; and the leather is, in fact, more impervious than that manufactured without puncturing.

The punctures remain open and visible on the grain side (the grain averages about one-fifth of the whole thickness of the skin), and so far from being detrimental, are highly advantageous, as they prevent the "drawing," which curriers are so well acquainted with, as it costs them so much labour to partially remove. It is on this "drawn-grain" that the cracking of the leather always commences; and many of the best bootmakers have the grain "baffed," or shaved off from those parts of the boot, where the greatest flexibility is required. The punctures have a further value to the patentee, inasmuch as they mark the article so plainly, that piracy, without detection, is impossible.

Thus half the time consumed in tanning, and much of the labour of handling, is saved, besides which a most important increase of profit arises from the greater weight of the article produced, and the saving of tan-liquor, which, in the ordinary process, is consumed in dissolving the gelatine with which it should combine, besides its decomposition by such long exposure to the atmosphere.

As the tanner purchases the skins, and sells his manufactured leather by weight, this increased weight is so much clear gain over and above the usual profits of the trade; besides which a very superior quality of leather is produced, not only from the best parts of the skin, but also the inferior and looser portions—the flanks, bellies, and shoulders, are filled up, and rendered more firm and durable, than by any of the ordinary processes.

It will be thus apparent, from the advantages arising from the patent secured by the company, that, in addition to those concurrent on its application in the process of tanning, whereby greater weight, or consistency, is given to the leather, and one-half the time saved in the process, the leather so prepared is found to be of a far superior quality, which appears to be borne out by the opinions of the eminent tanners and curriers, whose certificates are appended to the prospectus under notice. We are not prepared to say, that so large a return is to be contemplated as that set forth in the prospectus of the capital being returned in 12 months, or at a rate of cent. per cent. on the capital employed—although we are bound to admit, that the figures submitted to us, would appear to bear out these prospective advantages; yet, taking into consideration the return of capital at the early periods mentioned—assuming that the demand be equal to the capital employed—there can be no question that the advantages will be very considerable. We must, however, at all times, make allowances for the views entertained by patentees and projectors. It appears, from the prospectus, that upwards of 50,000,000 lbs. of leather per annum are consumed in this country. The profits of the company are estimated at 35,000*l.* to 40,000*l.* per annum, assuming one-fifth to pay the patentees 1*d.* per lb. The prospectus, we may observe, presents two features which are highly commendatory, and which we should like to see more generally practised, as such would at once test the merits of the patent and the honest intent of the projectors. These consist of—first, the openness of communication, as to the terms on which the patent has been secured, and every information appertaining to the process, with detailed practical statements; while the second secures to the subscriber for shares the full return of his capital: should the whole number of shares not be taken up, the expenses in such case falling on the projectors. We have had so many instances of late of deception, that we are well pleased to find an earnest of a reformed principle being henceforward acted upon.

* By the ordinary process, from 120 to 140 lbs. are produced.

WHITE PAINT MANUFACTURED FROM ANTIMONY.—At the last monthly meeting of the Liverpool Polytechnic Society, Mr. J. A. Forrest read an important paper "On a new mode of manufacturing white paint." He suggested that an excellent body paint, superior to that manufactured from lead, might be made from the white oxide of antimony. It had many advantages. He had ascertained, that though it was now high in price, were there a demand for antimony, that metal could be obtained in abundance at about 12*l.* a ton, whereas the lead used costs 24*l.* 10*s.* The new paint was, consequently, much cheaper; it was not so apt to lose its colour, and would spread over a much larger surface than an equal weight of the paint manufactured from lead. Mr. Forrest was prepared with apparatus to show the process of preparing the antimony, by means of sulphuretted hydrogen, but a wire broke, and the operation failed.

THE THAMES TUNNEL.—The annual general meeting of proprietors was held at Radley's Hotel, Bridge-street, Blackfriars, on Tuesday last, for the purpose of receiving a report from the directors, the re-election of directors, &c.—B. HAWES, Esq., in the chair.—The SECRETARY (Mr. Mason) read the advertisement by which the meeting was convened.—The CHAIRMAN stated that the meeting had been called pursuant to the Act of Parliament. A formal report was not considered necessary. The tunnel was in excellent order. As far as this grand work was concerned, the proprietors must be proud of it. There was no dividend yet to be declared. The directors, after 25 years of anxiety and labour, would have liked to give a dividend; but as some fought for glory, the original subscribers to the tunnel had the right of saying, that they commenced and completed what was at first considered an impracticable work.—The accounts for the past year having been read, the CHAIRMAN, in reply to questions, stated that the number of persons who had passed through the tunnel in 1847, was 958,347, against 1,010,573 in 1846. The tolls, &c., received in last year, were 3932*l.*, and in 1846, 4210*l.* A deficiency had been discovered in the late clerk's accounts. The Guarantee Society had paid the amount claimed from them, and the directors had made up the rest; so that the company had lost nothing by the defalcations of the party referred to.—The re-election of the directors who have gone out by rotation was proceeded with. Mr. J. Nolloth was elected in the room of Mr. B. Hawes, jun., resigned. Thanks were returned to the directors, and the meeting adjourned.—The CHAIRMAN having previously remarked, that there had been a distinct offer made to the directors for the purchase of the tunnel for railway purposes. Should, as was anticipated, the North Kent line be formed, the tunnel would be required, as the engineering difficulties were small. A dividend then might be expected.

VIRGINIA GOLD MINES.

[Extract from the letter of an English gentleman in America.]

Having a few days of leisure, and being desirous of some rural excursion, I was induced by two Scottish gentlemen to accompany them on a visit to some of the Virginia gold mines. We accordingly set off for Washington, from whence, after seeing the capitol, and everything else at all worthy of notice, we proceeded down the Potomack towards Fredericksburg, passing, in our way, by Mount Vernon, celebrated as the residence of the immortal Washington. After devoting a day to Fredericksburg and its neighbourhood, and seeing some very bad farming, we visited three mines, lying within a circuit of 20 miles from that city; but as only one of them offered anything at all worthy of remark, I shall confine myself to a description of that alone.

This mine, known by the name of the Vaucluse, lies in Orange county, Virginia, at a distance of 17 miles from Fredericksburg, and of one mile from the southern branch of the Rappahannock River, and was first discovered in 1832. For many years it was only worked as a deposit, or surface, mine, very much after the manner of some of the Cornish stream-works—no one suspecting that any veins or lodes of ore existed below. Since that period, however, several have been discovered, varying in width from 5 to 50 feet, and all running in diagonal dips, or like so many inclined planes, N.N.E. and S.S.W., through a kilias, or slate, country. Those lodes are composed of slate, talcose, schist, and quartz, with sulphurets, brown oxides, brown and black hydrates of iron, and are, in general, connected one with another by small threads, or leaders of the same description.

Many openings have been made on the different veins, at various distances from each other, and in all of them the same indications and contents are found—the same "mineral stuff" running, in the same inclined courses, through the same "kilasy" country. The only difference which I could discern in any parts of the several lodes, was that the amount of sulphurets increased in depth, and that the veins were harder at the bottom than at the shallower levels of the mine.

The ore, or stuff, constituting the contents of these veins, being all, more or less, impregnated with gold, is all indiscriminately dug out and drawn to the surface; where, by means of screens, it is divided into two portions—the coarse and the fine—the former of which is sent to the stamps, and the latter to the Chilian mills. The average value of this stuff is calculated to have been about 20 cents a bushel, though, under a better system of cleaning and smelting, it would be much more valuable, as an immense portion of the finer particles must be now washed away and lost.

The ground opened extends about 500 yards in length, 90 yards in breadth, and 60 feet in depth.* From this space about one-third part of the ore, or stuff, has been raised, cleaned, and smelted, realizing upwards of 104,000 dwts., or about 164,000 dollars worth of purest gold. Under a better system of washing and smelting, it would have been, I am sure, at least double in value. Of this the proprietors have become convinced, and they are now in search of some good German smelter.

On the whole, the mine is certainly a very extraordinary one, well worth visiting, and cannot fail, if properly managed, of yielding a very large profit to its owners. In fact, the quantity of vein stuff (all of which, as I have before stated, is more or less impregnated with gold) seems inexhaustible. I went to the spot prejudiced against the whole concern, and believing it to be like so many other gold mines I have read of in ancient and modern travels, but came away altogether changed in opinion, and satisfied that, with careful management, and an improved mode of cleaning and smelting, even a gold mine may be made a good speculation.

[From a letter of a later date.]

Since I last wrote you, I find that the owners of the Vaucluse Mine have had several pieces of the vein stuff (taken indiscriminately from the different lodes) analysed by Prof. Booth, of Philadelphia, and that the results of his analysis are as follows:—

1. A light-coloured sulphuret of pyrites, characterised by its crumbling nature, contained 388 grs. in 1 lb., or 16 dwts. 4 grs. in 100 lbs.

2. A thin vein of light-coloured pyrites and galena, contained in grayish-white slate, produced 3 grs. in 1 lb., or 12 dwts. 12 grs. in 100 lbs.

3. Massive and partly cellular quartz, with gold in it visible to the eye, produced 1·67 grs. in 1 lb., or 6 dwts. 13 grs. in 100 lbs.

4. A thick mass of sulphuret partially decomposed, with a brown ferruginous coating, produced 0·60 grs. in the lb.—or 2 dwts. 12 grs. in 100 lbs. This is enough to show how enormous has been the waste in cleaning and smelting the ores of this mine.—*West Briton*.

* The deepest shaft is about 100 feet, and has been opened to see how the lodes continued in depth. The only difference between that and the upper parts of the mine (as I have before observed) is, that it contains a greater quantity of sulphurets and hard matter, though nothing requiring gunpowder, or anything beyond the pick and gad.

METALLIC SAND.—We are glad to find this article is exciting attention on the part of our eminent engineers. Indeed, when we reflect on the chances of inferior material being used in the carrying out of the many gigantic railway and other works now in progress, and the haste in which some of them are completed, we cannot help expressing our belief, that it is a matter of the highest importance to the public themselves, to see that nothing which can add to their safety is neglected. Railway tunnels, bridges, and viaducts, are things which should be built to last for centuries, and nothing can be more dangerous in such works than inferior mortars and cements—hence the great public value that attaches itself to any *indestructible* material. The patent metallic sand appears to be very similar to the volcanic pozzolano, imported from Italy; but the high price of that article, and the difficulty of procuring it, has almost prohibited its employment in the engineering works of this country. The metallic sand is said to contain more silica and iron than pozzolano, and, consequently, is more indurating, and it binds better from its peculiar granular form, and sharpness of its angles. With blue lias, or greystone lime, the metallic sand enters most readily into combination; and, although a lime may be in itself hydraulic, and in subaqueous works possess considerable merit, it is a very erroneous, although a very common, conclusion that, because a lime is hydraulic, and resists the action of water, it is sufficiently durable and strong to defy the effect of atmospheric changes. Blue lias lime, although proof against the former, is not calculated to stand the combined influences of both. The admixture of metallic sand has been proved to impart to it a hardness and induration, of which, in itself, the lime is incapable. The action of damp promotes oxidisation; and the decomposed particles being disseminated in the surrounding bed, gives to it a flinty hardness and extreme density, and which time and exposure only tends to increase. This alone, we feel bound to admit, is sufficient to recommend the article of metallic sand to the most serious attention of engineers employed in the construction of works, where a mortar of such hardness, durability, and almost entire in compressibility, is necessary.

IRISH MARBLE.—The vessel *Victoria*, arrived in the River Thames, from Galway, has brought, as a portion of her general cargo, the large quantity of 53 tons of marble, the produce of the county of Galway, Ireland. There have, on one or two occasions, been some trifling importations of this valuable stone from the same country, and, if we recollect rightly, the same county; but we believe that no previous arrival of the kind can at all be compared in extent to the supply in the present instance.

THE ARCHIMEDEAN SCREW.—Although it is said to have been invented by Archimedes, and has long been named after him, there are circumstances which render it probable that those writers were mistaken who attribute it to the great philosopher of Syracuse. There is no evidence that Archimedes himself ever claimed its invention; and his countryman, Diodorus Siculus, who lived 200 years after him, admits that it was invented in Egypt. Again, Vitruvius, who was contemporary with Diodorus, and had, therefore, equal opportunities of ascertaining the history of the invention, never once ascribes it to Archimedes, although he evinces a laudible anxiety throughout his work to trace every invention to its true author.—*Mechanics' Magazine*.

MAGNIFICENT WATER-RAM.—M. Fischer, of Schaffhausen, constructed a water-ram, in the form of a beautiful ancient altar, nearly in the style of that of Esculapius, as represented in several old engravings. A basin about 6 in. in depth, and about 20 in. diameter, received the water which formed the motive column. The water flowed through pipes 3 in. in diameter, which descended in a spiral form to the base of the altar; on the valve opening, a third of the water escaped, and the rest was forced up to a castle several hundred feet above the level of the Rhine.—*Mechanics' Magazine*.

JONES'S FRICTION HAMMER.—We have been favoured with a sight of a novel machine which has just been completed, and is now at work at the Great Western Works, the invention of Mr. John Jones, manager of the works, who also invented the "Cambrian Engine." The machine is called a "Friction Hammer," and consists of frames of cast-iron, in which are vertical slides acting as guides to the hammer, and also supporting the machinery necessary for putting the hammer in motion. The hammer consists of a plane bar of flat wrought iron, so arranged as to work in the slides, and is raised by means of two vertical rollers turning in opposite directions, which are made to bear upon the bar by an exceedingly simple arrangement of levers. A slight pressure upon the handle of one lever raises the hammer to any height not exceeding 7 ft.; the pressure being removed it falls by its own gravity; this lever is also arranged so as to stop the hammer in any part of its descent, should circumstances render it necessary. The friction rollers are put in motion by means of straps and pulleys, fly-wheels being also fitted on each strap. A double punching and shearing-machine of great power, by the same inventor, has also just been completed at these works.—*British Mirror*.

NEW GALVANIC BATTERY.—One Laming Swan has taken out a patent in the United States for the employment in galvanic batteries of dilute sulphuric acid, kept saturated by an alkaline sulphate. He says, however, that he limits his claim "to the use of the solution in batteries used for telegraphic purposes," that he "may not be supposed in any way to interfere with experiments, having for their object the advancement of science;" that is, he limits his claim to the only use of it, of which any profit can be made. Highly liberal this!

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY	Royal Botanic—Inner Circle, Regent's-park	3½ P.M.
MONDAY	Geographical—3, Waterloo-place	8½ P.M.
	Medical—Bolt-court, Fleet-street	8 P.M.
TUESDAY	Medical and Chirurgical—53, Berners-street	4 P.M.
	Civil Engineers—25, Great George-street	8 P.M.
	Zoological—11, Hanover-square	3 P.M.
	Syro-Egyptian—71, Mortimer-street, Cavendish-square	7½ P.M.
WEDNESDAY	Society of Arts—Adelphi	8 P.M.
	Statistical—12, St. James's-square	3 P.M.
	London Institution—Finsbury Circus	7 P.M.
	Ethnological—17, Saville-row	8 P.M.
THURSDAY	Royal—Somerset-house	8½ P.M.
	Antiquaries—Somerset-house	8 P.M.
FRIDAY	Royal Institution—Albemarle-street	8½ P.M.
SATURDAY	Asiatic—14, Grafton-street	2 P.M.
	Westminster Medical—17, Saville-row	8 P.M.

On Mining, & the Practical Applications of Geological Science.

PROFESSOR ANSTED'S LECTURES AT KING'S COLLEGE.

LECTURE XV.—MINING FOR METALS CONTINUED—PHENOMENA OF MINERAL VEINS.

Professor ANSTED opened this lecture by giving a general idea of the plan he proposed to adopt in the remainder of the course. In his last lecture, he had given some account of the nature of mineral veins and their distribution; to-day he should further pursue that subject, and speak of other important phenomena, and all those facts, a knowledge of which was indispensable to a proper understanding of scientific mining. In his next lecture, he should consider the subject of filling the mineral veins, and then go on to that of finding them; then the working, and afterwards the treatment of ores. He did not intend to say much on the latter topic, as it would come more properly within the province of the metallurgist; but it would be necessary to mention it, as a part of the great subject of mining.

To proceed. In the first place, it was essentially important to understand the definition of the term "mineral veins." Werner, a great Saxon geologist, had defined them to be "mineral repositories, of a flat or tubular shape, which traversed strata without regard to the stratification, having the appearance of rents formed in the rocks, and afterwards filled up with mineral matter, which differed more or less from the rocks themselves." This was a comprehensive and excellent definition, and ought to be remembered. There were also other terms to be defined, many of them of a technical character, and which it was necessary to know—as, without a clear notion of the meaning of such terms, the subject could not be properly understood. The first of these was the term "*country*," which, when applied technically, referred to the rock containing mineral veins. If, for instance, in any district the prevailing rock was granite, it would be called a granite country; if limestone, a limestone country, and so on. True mineral veins might be grouped into three kinds: the first was called lodes, or right-running veins; the second, cross-courses, which cut through the right-running veins at right angles; and, lastly, the contras, which also cut the right-running veins, but generally at an angle of 45°. All mineral veins belonged to some one of these three groups—all, at least, with which miners had to do. The veins themselves also were known by very distinct names—one was called *gash vein*, being nothing more than a simple fissure, open in a greater degree at the top than the bottom, and mostly produced by contraction. It was, in fact, nothing more than a local crack, which often terminated with the rock in which it commenced. These veins were not often valuable, though there were many cases in the north of England mining districts, in which they were found to contain a considerable quantity of ore. A true gash vein had no connection with what was called a *fault*, or slip of the beds. If a vein had originated in a true fault—though it might appear to terminate—it was never safe to calculate on its ending there. Indeed, it was quite certain, that anything of the nature of a vein, occasioned by a slip of the beds, commencing from below, could not terminate below, at such moderate depths as we were able to penetrate; and, therefore, if the fact were determined, that a vein was a *fault vein*, they might be sure of its continuing in the deep in some way or other. This was a circumstance which miners would do well to pay attention to. A fault vein of an ordinary kind was often called a *rake vein*—such veins traversed generally large districts, and varied very much. When they passed through alternate hard and soft rocks they were occasionally zig-zag; but it frequently happened that they went in one direction so far, as not to exhibit this peculiarity. If a fault vein apparently terminated—as, for instance, at a basalt rock—it was possible that the continuation might be at a considerable distance; but it would necessarily continue below the basalt, and so on—it was, therefore, clearly of importance to be able to distinguish between a mere gash vein and a fault vein.

Veins often extended in particular districts with reference to the strata, varying according as the country consisted of granite, limestone, sandstone, clay-slate, mica schist, &c. Some veins were known as *pipe*, or *shoot* veins, when they became complicated with the surrounding rocks; these often embraced some portion of the country as well as of ore. Another kind of vein was called a *stockwork*, from the German *stockwerk—stock* signifying a step. A stockwork was a case in which the vein was broken up, or very much extended. Sometimes veins were expanded very considerably, as happened in some of the Alston Moor mines, where the expansion was almost always against a wall of rock of a particular kind. Varieties, in the form of veins, were continually met with in Nature. In Cornwall, they had what were called *courses of ore*, which consisted of portions of the vein, at certain depths, becoming especially productive. In Flintshire, it was not uncommon for the ore to make its appearance in veins which expanded into *drusy* cavities. These were often filled with crystals of extreme beauty; and the walls were also beautiful and regular. No doubt there were a vast number of veins in different parts of the world, in which various kinds of expansions occurred; but as these peculiarities of form were local, they were only known by local designations. When, for instance, as happened sometimes in Cornwall, there was an expansion of ore, without much reference to the surrounding vein, it was called a *floor*, or a *squat* of ore. These were, in fact, great lumps of ore, apparently distributed without reference to any particular vein. A similar kind of thing in Derbyshire was called a *belly*, and in many parts of Eng they were called *nests*, or *pockets*. If, however, these expansions of the lodes contained no metalliferous ore, they were called *drusy cavities*, if they were hollow and partly filled with perfect crystals, but otherwise no name at all was given to them. When veins were abruptly contracted, or gradually became smaller, they were called *nipped*, or *twitched*. These often rendered the veins troublesome to make out, as the nipped vein sometimes disappeared altogether for a short distance. There were many other terms, which he would explain when he used them.

Having said so much with regard to veins and their various characters, he would now proceed to consider the different *systems* of veins. The first and most important fact connected with the order in which veins intersected each other, was the *compass bearings* which they had. The compass bearings of veins was a subject of the greatest possible importance. In a vast majority of cases, the direction was perfectly definite; and the principal systems were known by the names he had before mentioned—viz.: *right running veins, cross-courses*, and *contras*. With reference to this fact, the systems of right running veins traversed large tracts of country in the same direction. They derived their appellation from the fact, that they were the most likely veins to contain metalliferous ores; and though sometimes veins were found not belonging to the system which contained ore, still this was the exception and not the rule. In Cornwall, the direction of right running veins was east and west, or rather a little north of east, and south of west. There were not many exceptions to this rule. When they looked at the map, the exceptions might appear numerous; but they were not so in reality. Mr. Henwood had made some very close observations on this point; and had found that, in the case of 300 right running veins, which contained metalliferous ores, the mean direction was only a few degrees different from east and west—the mean of nearly 300 observations giving 4° north of east, and south of west. This was an important fact, because it showed that there was some law in force which influenced the filling of veins with metallic ores. Right running veins were the most productive; and careful examination had established the fact, that the direction of the veins was a most important matter, with regard to their productive quality. The veins, called *contras*, cut the right running veins at an angle of 45°. They were not often important; but they were sometimes richly metalliferous. The cross-courses which cut the right running veins at right angles, were generally in Cornwall due north and south. In the north of England, in the Alston Moor district, in Derbyshire and in Flintshire, they had the right running veins even more distinctly east and west than in Cornwall—that was, with fewer local varieties. The veins in Cornwall might be considered to form different systems—each system having its own peculiarities. The first of these were the earliest, and were the most frequently cut. They were the older tin veins. The next were those which contained tin and copper; but were clearly of a less ancient date than the first, and were more frequently a little removed from the true east and west direction. The third class were the east and west copper lodes, which were very important for copper. They generally cut across the tin lodes when the two met; but it very rarely happened that the tin cut across the copper. In the cross-courses, a little tin and copper were found; but the more general productions were silver and lead. The systems of veins which thus contained ore, were three or four in number; but there were only two of great importance. The *contras* of Cornwall contained copper, and were sometimes very rich; they also sometimes had lead and silver with the copper, and sometimes those metals without copper.

The principal lead mines of England were in Devonshire. There were lead districts also in Flintshire, Derbyshire, Yorkshire, and Northumberland. The intersection of veins with other veins, cross-courses, and contras, was a subject of great importance in connection with the age of veins, and the mode of filling them.

The next thing to be considered was the position and nature of the veins themselves, with reference to the surrounding rocks. Veins were seldom strictly vertical—they had generally more or less inclination. This, geologically speaking, would be called the *dip*, but in mining it was termed the *underlie, hade*, or *slope*. The sides of the veins were called *walls*. In coal mining, they would speak of the *floor* and of the *roof*; but the lower part of a mineral vein was called the *ledger side*, and not the floor. The upper side, instead of being called the roof, was termed the *hanging side*. The walls of a vein in Cornwall were called the *cap'es*. The material between the hanging and ledger sides, was mostly known by the name of *veinstone*, or *gangue*. This was a very general term, and included many very different minerals. The magnitude of veins was very variable and indefinite; a vein could sometimes be traced for many hundred yards, or even several miles, along the surface; but was sometimes limited to a few feet, and in others it did not appear continuous at all. The breadth was also variable, being sometimes considerable, but very unequal; while in other cases it would be uniform for a great distance. The depth was generally quite unknown; as an example of particular veins, he might mention that of the Veta Madre, near Guanaxuato, in Mexico—a large vein, from 25 to 30 yards in width, the depth of which had been proved to upwards of 1000 ft., and it had been traced continuously along the surface for more than six miles; this was an extremely gigantic vein. As a contrast, he might mention one near Limousin, in France (a tin vein), which was not more than from ¼ in. to 1 in. in thickness, and yet was thought worth working. As examples of the difference of veins, in respect of their being traceable on the surface, he might mention a lead vein at Alston Moor, which was distinctly made out as connected for a distance of 10 miles; but there was a silver vein at Uspalata, in Chili, which was 90 miles long in its main course, with a thickness of 9 ft., and from which valuable strings extended, in various places, for 30 miles. The size of veins, too, was extremely variable. There were some stockworks of iron ore at Piedmont 350 yards thick; and at Fahlun, in Sweden, the expansion of ore reached from 100 yards to half a mile, and there were cases in other parts of the world of a similar description. Veins also varied as much in the richness of ores as in their length, breadth, and depth. The nature of veins influenced very much the chance of finding them when lost. If it were known that a certain vein was a gash vein, they would be at once aware that it might come to an end on a particular kind of rock; but if it were a fault vein which was lost on the rock, they might be equally certain of finding it again somewhere on the same rock. When veins contained metal they were called *quick*, and when they became barren *dead* veins. The latter were much more likely to be steady and continuous in the country than the former. He had seen instances in Germany, where veins, while they were dead, run with the most remarkable uniformity for half a mile together; while productive veins would seldom be steady for a few yards.

When such veins, therefore, were irregular, that was a good sign of their becoming productive. It was a remarkable fact, that veins did not put on their true character near the surface; and this might arise in consequence of the admixture of oxygen with the various materials, and consequent decomposition. It was, therefore, important to know what was the true character of a vein, in order to calculate the chances of its being valuable. It was also useful to be familiar with the facts known, with regard to the different kinds of country inclosing the lode, and the consequent effect upon the lode. The country was, generally speaking, much softer in the neighbourhood of the vein—a fact, the cause of which was not clearly made out. There was, however, he believed, little doubt of this being generally true; and such a softness in working was always regarded as a favourable indication. The country received different names. In Cornwall, one kind was called *growan*—this was composed of soft granite, decomposed granite, or granitic gravel; another was *killas*, generally an argillaceous schistose rock, and mostly of a pale blue colour—the result of the presence of iron. This term was often applied by the Cornish miner to everything that bore a resemblance to schistose rocks; and, if he were taken to another hemisphere, he would still call such rocks "killas." This was important in the interpretation of Cornish miners' reports. Killas in Cornwall was a clay-slate of the Devonian or Silurian period. Another name often used in Cornwall was *elvan*, which was applied to the porphyritic matter filling up a dyke. These terms, although constantly in use, were very indefinite—a fact much to be regretted.

The form of the adjacent ground was a point of some interest; but it was to be lamented that so few facts, in relation to this subject, had been recorded. He (Prof. Ansted) had, however, himself noticed some facts connected with the presence of rich portions of veins on the ridges of hills; but he was not aware of recorded facts on this subject.

He now came to the materials which the veins enclosed. These were generally themselves crystalline, whatever was the kind of rock, whether granite, gneiss, mica schist, clay-slate, limestone, or sandstone, in which the vein was contained. The veinstone enclosed the ore; and, on the back of the ore, was often a mineral of loose texture and yellow colour, called, technically, *gossan*. Although the gossan usually contained disintegrated oxide of iron, mixed with quartz and other minerals in a similar condition, still the veinstone itself was crystalline. This formation was known by the name of *gangue, matrix*, and *veinstone*. The filling of veins containing ore, presented phenomena of great complexity; but, as he had said before, he should, in another lecture, treat on this subject. Before considering, however, the cause, something must be understood of the chemical and electrical condition of minerals in lodes. Those which contained metals were of the greatest practical importance, although even non-metalliferous veins presented scarcely less instructive features, with respect to the real history of veins in general.

Veinstone consisted sometimes of spar, which was hard and drusy, containing pyrites, and other metallic sulphurets; of quartz, which was crystalline, massive or porous, and sometimes inclosed native metals disseminated, especially gold; of fluate lime, or fluor-spar (bluejohn, as it was called in Derbyshire), which often contained oxides and sulphurets of metals; and, lastly, of the sulphurets of barytes (cawk), and containing also oxides and sulphurets of the metals. These were the principal materials inclosed between the walls of veins. The materials which filled the vein was not always connected with the country; and, in some cases, was not affected by the different conditions of the walls; in other cases, however, the upper, or ledger, side would be marked very distinctly with two or three kinds of crystals, which would be found to correspond exactly with those on the other side of the vein. In other cases, the metal was disseminated through the veinstone, and sometimes it was partially disseminated, also, through the mass of rock; sometimes it occurred only in the middle, and sometimes only on the sides of the vein; and one metal occasionally occurred on one side, and a different metal on the other.

The talented lecturer concluded, by directing the attention of the audience to a number of specimens on the table, exemplifying the particular conditions he had been describing.

[The following lecture, in which this subject was continued and completed, will be given in next week's *Mining Journal*.]

GEOLOGICAL SOCIETY.

FEB. 23.—Sir H. T. DE LA BECHE (President) in the chair.

A. W. Talbot, Esq., was elected a Fellow.—A paper, by G. A. Mantell, Esq., L.L.D., entitled, "Additional Remarks on the Geological Position of the Deposits in New Zealand, which contain bones of Struthious Birds," was read. A recent letter from Mr. Walter Mantell, in New Zealand, gives particulars regarding the occurrence of these fossil bones. They were found near the embouchure of the Waingongora, which rises in the volcanic ridge of Mount Egmont. The river seems recently to have changed its course, probably in consequence of the elevation of the land, and is now cutting through a lofty cliff of loose conglomerate, overlying a finely laminated sand. The latter rests on a blue clay, containing recent marine shells. In a loose sand-drift, at the base of an ancient cliff, Mr. Mantell had an opening made, and soon came to the bed containing bones. These were at first so soft, that if strongly grasped, they fell into clay. Many bones were found—some of them apparently lying in their natural position; but the natives from the neighbouring village collected around him, and began digging themselves, and not only interrupted his researches, but trampled on and destroyed the bones he had laid out in the sun to dry. Along with the bones were portions of egg-shells—one fragment measuring four inches long. If the native traditions be worthy of credit, the ladies have cause to mourn the extinction of the Dinornis, as the long feathers of its crest were prized by their remote ancestors above all other ornaments.

A paper was next read, "On the Geology of Ridgway, near Weymouth," by C. H. Weston, Esq.

INSTITUTION OF CIVIL ENGINEERS.

MARCH 7.—JOSHUA FIELD, Esq. (President), in the chair.

The discussion upon Mr. Redman's paper, "On Dock Entrances," occupied the entire evening, so that no paper could be read. The speakers examined the merits and defects of the several dock entrances in the Thames, and in other situations, and the general result appeared to be, that, although the engineer must be guided by local circumstances, yet, that in situations where the river was sufficiently wide, and the position of the land permitted, an acute angle pointing up the stream, was the best for docking vessels with the flood—that the reverse would be best for undocking ships. In ordinary widths of rivers, therefore, the end would be attained by forming a bay sufficiently deep to render the water still in front of the dock, the wing walls being so much splayed as virtually to give the directions up and down the stream as circumstances required. The peculiar positions of the docks at Ipswich, by Mr. Palmer, the alterations of the Duke's Dock at Liverpool, by Mr. Cubitt, and other cases, were sustained in support of the arguments of the speakers, who all united in praising the industry and talent of Mr. Redman, in bringing forward the subject in the complete manner he had done.

Mr. CHUBB (St. Paul's Churchyard) exhibited an iron box for the transmission of money, bullion, &c., on railways. A wrought-iron box, lined throughout with hard steel plates, is locked down at the terminus to a strong iron plate in the guards carriage; the key of this lock, and also the key by which access can alone be obtained to the interior, is kept at the principal terminus by the officer who has charge of the cash. Each station master is provided with a key which opens a small lid at the top; when he has money to send, he unlocks the lid, places his bag of money or parcel in an open drum underneath, moves a handle which turns the drum, and the cash is dropped inside: before he is able to take out his key, he must move the drum back, and see that the money is gone. It will be observed, that he cannot leave the lid unlocked: when the box arrives at the terminus it is unlocked from the frame, taken into the office, and placed on a similar frame there. The cash keeper only can with his key then get access to the money.

At the monthly ballot, the following gentlemen were elected:—W. Baker, J. England, S. Clegg, jun., J. Elliot, and H. Fowler, as members. E. Adams, E. Hughes, G. W. Harris, S. W. Leach, A. Drysdale, R. Rawlinson, F. Ransome, and G. H. Saunders, as associates.—The following paper was announced to be read at the meeting on Tuesday, the 14th of March, "On the Forms and Constructions of Sea Walls," by Wm. J. Macquorne Rankine, Assoc. Inst. C.E.

THE PRESIDENT OF THE ROYAL SOCIETY'S FIRST OFFICIAL SOIREE OF THE SEASON.

On Saturday evening last, the Most Noble the Marquis of Northampton threw open the whole suite of rooms of his princely residence in Piccadilly to the *élite* of the aristocracy, and the English and foreign scientific corps. As we do not occupy our columns with a long list of names, however distinguished, we will at once proceed to describe the models, specimens, &c., which were exhibited in fewer number than usual.

Some beautiful specimens of marine animals, collected off the Shetland Isles, were exhibited by Mr. Goadby, and preserved in fluid prepared by him, by which means several specimens of the class *Acalephæ* (stinging nettles, sea blubbers, or jelly fish) were shown—every previous attempt to preserve them in spirit having failed. Mr. Bain exhibited a working model of his electric telegraph. Messrs. Powell and Lealand, of Seymour-place, Euston-square, brought some beautifully finished microscopes; a portable one was remarkable for its small size, when compared to a standing one of equal power. Miss Nichols exhibited a few of her beautifully-painted cameo brooches. An old Roman clock, made by Habrecht, in 1589, was also exhibited; and, like all these ancient pieces of mechanism, shows us to what perfection, in certain points, they had been brought. The section of a street, having sub-ways for lighting, water, and drainage, with a new sort of composition stone for making the pipes. Felix Summerly sent a few articles of *vertù*; there was also a bust in marble, the size of life, of Jenny Lind, beautifully executed. Mr. Apsley Pellatt sent some of his magnificent glass productions, amongst which was an antique-formed glass vase, engraved with the battle between Alexander and Darius, which occupied the artist 5½ years.

Mr. Schmidt, of 28, Sutton-street, Waterloo-bridge, was also there, to explain the Cantelonian system of hydro-incubation; and, to judge from the successive crowds that surrounded him and Mr. Cantelo, carried off the attention of the company as usual. We shall refer some other time, at large, to this important national question of introducing a new source of food, and of employing the hands, at present useless, on a farm to effect it—viz.: the young children and old parents of the farmer. The hen has only two broods a-year, sitting on, perhaps, 20 to 26 eggs, and rarely bringing to *marketable fowls* more than 15 or 16. The hydro-incubator has 18 broods in the year, and out of 1800 eggs (100 eggs being the contents of the smallest size) will produce 1500 *marketable fowls*, from 2½ to 3½ lbs. weight. A calf takes four to five years to fatten up to 12 cwts.; now, 600 chickens can be raised to 15 and 18 cwts. in 96 days—giving an immense advantage to the poorer class of farmers, as he turns his money from 16 to 20 times. Mr. Cantelo's physiological discoveries consist in finding the exact blood-heat of the feathered tribe in general to be at 106°, instead of 98°, Fahr., as hitherto supposed; and that, during the process of incubation, the egg is submitted to two distinct temperatures—viz.: that of the hen's breast, which is in immediate contact with the germ of the egg, and the other parts of the eggs which are of about the temperature of the surrounding atmosphere. Mr. Schmidt exhibited eggs in every stage of incubation, and several chickens cut their way out before the company—amidst the cheers and hilarity of this staid assembly.

The English nation pays annual duty upon 70,000,000 to 90,000,000 of eggs, and 8,000,000 or 10,000,000 of poultry may be supposed as coming from Normandy and Belgium; now, with a very little care, all this large sum of money, paid to foreigners, might just as well be kept in our own farmers' pockets; for, although the British lion might be at first somewhat clumsy, yet he would soon vie with the French cock.

From calculations that we have seen, founded upon the experience of some years, and upon small trials, any amount of capital employed would produce a return of 60 to 75 per cent. annual profit, as the rearing of poultry is now reduced to mathematical calculation—and one really can "count one's chickens before they are hatched!" We certainly must all admit, that it is not a taste to create, but a want to gratify, as the public would certainly eat poultry if the price were as low as butcher's meat. Supposing each person in the United Kingdom to eat only one fowl a month, we have the enormous amount of 336,000,000 of poultry, of which not 10,000,000 are at present supplied, thus leaving an immense field open to the capitalist. The guano and feathers would about pay one-half the expense of labour. We understand that the Zoological Society has requested some Emu's eggs to be submitted to the Cantelonian process of hydro-incubation, and that five have already been sent from the gardens. These eggs are of a light sap green colour, closely covered with corruscations of dark sap green; they weigh from 17 to 18½ ounces, and measure about 13¾ to 10½ inches, both circumferences.

An elegant supper was laid out in the lower rooms, and his lordship's magnificent plate was tastily displayed and interspersed with fruit and flowers. Being Saturday night, the company separated by 12 o'clock.

FALL OF RAILWAY ARCHES AT MANCHESTER.—On Wednesday morning, 7 out of 18 brick arches, forming part of a viaduct erecting on the north-eastern side of Manchester, by the Lancashire and Yorkshire Railway Company, to connect the lines of that company with the London and North-Western line at Ardwick, gave way and fell about 10 o'clock. Eight of the 13 arches had been erected before the commencement of the winter, and had stood till now, with the centres in them; the centres, however, being required for a continuous portion of the viaduct, of which the abutments had been run up, a number of men had been set to work during the last few weeks to build in the spandrils at the top, between the arches, and to throw on the ballast for the purpose of consolidating the work. They had proceeded with the work up to Wednesday morning, and had taken out the centres from six arches, commencing at a heavy stone abutment (intended for a bridge over Ashton old road), and running eastwards towards Ardwick, without any reason to doubt the solidity and firmness of the work. They then, about 10 o'clock, removed the centres from the seventh, or central arch—and had not completed doing so more than a few moments, before the arch sprung upwards from the centre and fell. The whole of the six arches northward, from which the centres had been taken, also fell immediately afterwards, leaving only the stone abutment of the intended bridge over the road standing, and the six arches at the other end, from under which the centres had not been taken. The contractors are Messrs. Noell, Hemingway, and Co.; and the loss to them, supposing they are responsible for the whole, will be about 1000*l*. It was a fortunate circumstance that the whole of the workmen at the time were standing on the other arches, from which the centerings had not been removed—they all escaped. The strength of the masonry was within half a brick of that usually adopted for arches of the same kind, and it was thought quite equal for the purposes for which the line was constructing, and the accident is attributed to want of scientific knowledge or judgment in the ballasting at the top of the masonry.

A SPEEDY AND EFFECTUAL CURE OF A SEVERELY-BRUISED ANKLE BY HOLLOWAY'S OINTMENT.—Extract of a letter from Mr. H. Watkinson, of the *Spalding Free Press*, dated Feb. 19, 1846.—"To Prof. Holloway.—Sir: A youth in our employ knocked his ankle so severely, that the most dangerous symptoms were brought on, thereby rendering him totally unable to walk or attend to his duties. Many preparations were applied, but all to no effect. At last he had recourse to your invaluable ointment, when, by the use of a single pot, his ankle was perfectly cured, and the boy became as active in walking and working as he was before the disaster."—Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

Mining Correspondence.

ENGLISH MINES.

ANTIMONY AND SILVER-LEAD MINES.—We have this week been clearing up the antimony lode at Tregear, in order to remove the hedge which had fallen in (on account of the ground not being properly secured), and to take out the antimony under it; from what we have discovered, we find you can have antimony similar to the sample sent in any quantity, and it appears there is another lode coming into the main lode before opened; we are now raising large stones of from 150 to 170 lbs. weight of solid antimony, similar to sample sent, and we will send you some large stones this week. Capt. J. Floyd, of Tin Vale Mine, was here last week, and carefully examined the lode; and he is of opinion, that there is plenty of antimony to be had, not only from the present lodes, but from those farther to hill. Mr. C. Williams, in his report, states—I have frequently inspected this mine, and have now done so by your request. It is situated in the parish of St. Kew; the lode is running north and south, 4 ft. wide, of solid antimony, and of good quality. The sett is very extensive, and I find there are other lodes passing through it, as well as the Wheal Sarah lode, which is silver-lead, and which is still working; and, although a newly discovered mine, 7 tons of ore have been returned, and found to be very rich for silver. This mine was discovered, about 4 ft. under the surface, in sinking a shaft; but after having done so about 3 fms., and having no engine, the men were obliged to desist sinking, there being a great influx of water; they then drove on the course of the lode 6 or 8 ft., and raised from 10 to 12 tons of ore—but the water still increasing, the men were obliged to abandon it altogether, or take up a level about 50 fms., which would be about 12 fms. deep at the mine, at a cost of from 80*l.* to 100*l.* This would effectually drain the mine at that depth, where there can be no doubt of large quantities of ore being obtained from the present appearances of the lode, and the chance of further discoveries; the carriage to the sea-port is trifling, where a smelting-house could be erected at a trifling cost, and a railway will shortly pass through the sett, which will save a great expense in land carriage. I can only add, there can be no doubt, in my opinion, of its being a first-rate speculation.—Jan 28.——Since the above was written, Mr. Williams adds, I have omitted sending the 800 lbs. of antimony, in the hopes of getting some better stones, as the miners have been clearing out the hedge which had fallen in, and they have got up a considerable quantity of ore, and I find I can now send you from 12 to 15 tons immediately, which, if you can sell, would bring a considerable sum of money, and, after paying all expenses, would leave a good profit to the adventurers. The miners this morning, in my presence, took out stones of ore of 150 lbs. weight each, and I am certain, from the present appearances, that large quantities of ore may at once be obtained at a trifling outlay. Several gentlemen have been here, and have expressed their astonishment at the size of the lode, and fineness of the ore obtained.—March 5.

BARRISTOWN.—The Slob and Kiln's shaft are sinking with all possible dispatch. The pitches in the old mine look much the same as last reported—without any improvement. In the adit end east the lode is looking well, producing a half ton per fathom; we have communicated this end with the cross-cut north from Dooge's shaft, and have set the back on tribute, which also looks well; the lode looks best in the bottom of the level. The flat-rods to eastern flat-rod shaft will be at work before this reaches you.—March 4.

BEDFORD UNITED.—At Wheal Marquis, the lode in the 90 fm. level, east of the sump winze, is 3 ft. wide, and worth 40*l.* per fm.; and in the 90 fm. level west the lode is 2 ft. wide, producing good stones of ore; in the stopes, in the back of this level, the lode is worth about 18*l.* per fm. The lode in the 80 fm. level east is 2 feet wide, producing stones of ore, and very promising. In the 70 fm. level east the lode is 2 ft. wide, composed of spar and mundic, with stones of ore in places; and in this level west, on the south lode, we have met with the western cross-courses, which we have not yet got through. Harvey's winze, in the 70 fm. level, has been communicated to the 80 fm. level since last report. The lode in the winze, in the 47 fm. level west, on the south lode, is 18 in. wide, producing a little ore. The pitches are without material alteration. The engine-shaft is now 7 fms. 3 ft. below the 80 fm. level. The lode in the 25 fm. level, east of the south engine-shaft, is 2 ft. wide, and more promising than it has been for some time past; and in the adit level east, the lode is 18 in. wide, composed of peach, spar, and mundic, with spots of tin in places.—March 8.

DEAN PRIOR AND BUCKFASTLEIGH.—The lode in the 20 fm. level west is rather improved in appearance, forming itself regular against the south ground—inasmuch that I think it is nearing another shoot of ore, as the leader adjoining the south lode (about 1 ft. big) is much stained with an oxide of copper and iron, very similar to the lode now working on in the back of the 20, a few fathoms behind the end, as marked in the plan forwarded; there has been about two tons of very good copper ore broken, from the pitch in the 20, these last eight or nine days; and I should think there is a great probability of its continuance, as the ore appears to be falling back east, as the men open ground in that direction. The cross-cut in the 30 is set to drive at 6*l.* per fm.; I expect there are 5 fms. further to drive to intersect the lode, which work will be carried into effect as fast as possible. The necessary preparations are making for the dressing of the ore, and the crushing-machine will be completed in another week. As regards the quantity of timber that is wanted immediately—say, 150 ft. yellow pine—the price, I presume, at Totnes, is 7d. per foot; about 200 ft. of drain balk may be had from 65s. to 70s. per load of 50 ft.; likely some fir and beech could be had in the neighbourhood, from 7d. to 1s. per foot—this sort of timber will answer many purposes; a piece of oak, for frames for stamping-mills, will be all that will be required, about 20 ft.—say, 2s. 9d. or 3s. per foot (a selected piece); therefore, 500 ft., purchased as convemency offer, will suffice before other work (such as sinking the shaft deeper, casing, &c.) is set in motion.—March 4.——We have set the cross-cut to drive towards the lode in the 80 fm. level, limited until the last Saturday in the month; the strata is of a very promising description, and congenial for ore; in cross-cutting, we have just discovered the branch that I hinted about when sinking the engine-shaft, dipping towards the lode, composed of spar and some small prills of yellow ore, which are good indications. In the 20 fm. level the lode is large, and getting more settled, composed of capel, spar, and mundic—price for driving, 5*l.* per fm.; in the pitch in the back of the level, the lode still holds out its very promising character—a large champion lode, and producing good saving work for copper. The house for the crusher is covered in; and we shall be ready, by Saturday next, to put the crusher to work. We are making the necessary preparations, as it regards the dressing, for that purpose.—March 8.

DEVON AND COURTENAY CONSOLS.—The lode in the end, driving east, on the gossan lode, is 2 ft. wide, composed of mundic, spar, and spots of ore, making a good wall to the north, and a pretty good stream of water issuing from the lode. In the end driving east, on the south lode, the lode has not been taken down since last report; in the end driving west, on the same lode, the lode is 1 ft. wide, producing some good saving work, and has every appearance of an early improvement. The ground in the engine-shaft has not been so favourable for sinking this week, the killas being rather harder and mixed with layers of spar.—March 7.

EAST CROWNDALE.—Our engine-shaft is down 56 fms. 3 ft.; the ground is rather better, composed of killas, with branches of spar and strings of copper ore dropping into the main lode. The 47 fm. level, driving on the course of the north lode, is at present poor, although the appearances are very favourable, there having a branch come in from the north, containing spar, mundic, and spots of lead; when this falls into the lode, I fully expect a bunch of ore. We intend to put a pare of men (part of Rix Hill shaftmen) to stope on the course of ore gone through in the 47 fm. level west, the beginning of next week. The foundation for the engine-house at Rix Hill is cleared out, the road to the mine almost finished, a good quantity of stone risen, and expect, if the weather permits, to lay the foundation stone next week.—March 4.

GALLOWAY.—Since my last report, we have found it impracticable to fork the water in the old workings; it is pretty evident that these workings are communicated with a stream of water, which crosses the lode, and thus finds its way into the old workings; we have, therefore, been costeaning further south, and found the lode 50 fms. south of the old mine, where we have commenced sinking a shaft; the lode is rather small, but produces stones of lead.—March 4.

GREAT MICHELL CONSOLS.—The lode in the sump winze is 7 ft. wide, 2 ft. of which (although not so good as it has been) still continues to produce good work. In the 35 fm. level, west of the sump winze, the part of the lode being carried 4 ft., is composed of capel, mundic, peach, and spar, with a small portion of ore intermixed throughout.—March 8.

GREAT ROUGH TOR CONSOLS.—I have but a very small progress to report to you this month, however as much as could be done. In Morris's shaft we have sunk 1 fm. 4 ft. 3 in.; the ground throughout the month has been very troublesome, and still continues so, occasioned by the lode previously mentioned, and which is still in the shaft, and not yet cut through, the underlay being very little; I fear it will remain with us during a great part of the present month; the price now for sinking is 25*l.* per fm. In Thomas's shaft we sank 1 fm. 3 ft. 6 in.; this was done in three weeks, the rest of the time being employed in putting down the new pitwork, and which will occupy us a fortnight longer; and, when finished, I hope to make good speed in sinking, as the ground is still very favourable; there is another branch just cut in the bottom of the shaft, underlaying towards the great lode, and producing good stones of ore—in fact, much better than any I have before seen from the branches previously met with.

HEIGNSTON DOWN CONSOLS.—By the settling paper accompanying this, it will be seen, I have commenced driving the 20 fm. level, east of Bailey's shaft, in which the lode is 2 ft. wide, producing good stones of tin; and, as soon as the water falls off, I shall resume the sinking of the engine-shaft, which I have every reason to think will be in a few days. Biddle's adit is still driving by four men; the ground is just the same as when last reported.

HOLMBUSH.—The lode in the 120 fm. level north is 4 ft. wide, composed of spar, intermixed with lead ores; the lode in the south end, in this level, is 5 ft. wide, composed of spar and stones of lead, saving work. The lode in the 110 fm. level north is 3 ft. wide, composed of quartz and stones of lead; the lode in the south end, in this level, is 6 ft. wide, composed of quartz and lead, producing half a ton of lead per fm., with favourable ground for driving, price 3*l.* per fm.; the lode in the stopes, in the back of this level, is also 6 ft. wide, producing 5 cwts. of lead per fm., ground soft for exploring—set at 30s. per fm.; we have, likewise, set a pitch, in the back of this level, at 8s. in 20s. on the value of the lead only. You will please to observe, that all the workings in this level are on the eastern part, which appears to be the main part of the lode; and, should the present direction of both parts continue, they will form a junction at or near the 100 fm. level; we intend soon to cut through the horse of killas, which is 9 ft. wide, and intersect the western part of the lode in the 110, when that level is extended a few fathoms further south; the lode in the 100 fm. level south is 15 in. wide, composed of spar and stones of lead; the Flap-jack lode, in the 100 fm. level, east of the lead lode, is still divided in branches; the two extreme ones are 3 ft. apart, and small, composed of spar, mundic, and spots of copper ore—making two well-defined walls, with favourable ground for driving—being set to six men at 3*l.* 10s. per fm.; we intend to hasten on this level as fast as possible, to prove the lode to the east of the great cross-course; the pitches, in the back of this level, are set at 12s. and 13s. 4d. in 20s. on the value of the lead; we have set a winze to sink in the bottom of this level, on the lead lode, to four men, at 3*l.* per fm., to ventilate the 110 fathom level south, when that level is extended far enough in that direction to make the communication, as well as to lay open tribute ground. The lode in the 90 fm. level south is 20 in. wide, composed of spar and spots of lead. We weighed, at Calstock Quay, on Thursday last, December and January copper ores, 96 tons 15 cwts.; and have sampled, this day, a parcel of silver-lead ores, computed 20 tons—samples of which have been sent to the different companies, to be tendered for at the company's office, on or before the 15th inst.—March 7.

KIRKCUDBRIGHTSHIRE.—The lode in the 50 fm. end, driving west, has improved since my last, producing about 15 cwts. of lead per fm. The lode in the 40 fm. end is about 2 ft. wide, producing from 8 to 10 cwts. of lead per fm. The lode in the 30 fm. level end east is a little improved in character, yielding some stones of lead. The lode in Keith's shaft, sinking under the 30 fm. level, is not quite so good for lead as we have seen it—say, 15 cwts. of lead per fm. To-day we shipped 21 tons 10 cwts. of lead, per the vessel *Cree*, for the Holywell market; this vessel also intends to take the *Mary's* cargo, now riding in Kirkcudbright Bay, where she sprung a leak.—March 4.

LEWIS.—Since my last report, we have holed the sump whim-shaft, sinking below the 60, to the rise in the back of the 70 fm. level; in this level (70), the sumpmen are opening a plat, and preparing to drive south, in order to intersect the south branch, which we expect to cut in about 3 fms. The lode in the 60 east is 2½ ft. wide, worth 4*l.* per fm. The 60 ends, east and west, on south branch, are set at 5s. in 20s. for saving the tin. The 50 end east, on south branch, is driving at 6s. 8d. tribute. The lode in the 40 end east, on south branch, is 4 in. wide, worth 5*l.* per fm., much improved since my last. The lode in the 20 east is 2 ft. wide, yielding some tin, and very promising. The greater part of our tribute pitches are looking very cheering.—March 4.

MENDIP HILLS.—During the past week, we have worked the furnaces three days—I hope, should no unforeseen obstacle intervene, to work them about the same time this week. I find the produce of metal continues much the same as last reported, about 16½ per cent. in the slag ground. We continue to lay open the cutting, and extend the tram-road towards the richer part as fast as possible; the carpenters are at present engaged in making the necessary work for the dressing department, and the masons in walling in a place near the engine-house, to secure the coal and coke. The lode in the 38 fm. level is about 3 ft. wide, composed chiefly of spar and iron, hard for driving.—March 6.

SOUTH WHEAL MARIA.—The north cross-cut, in the 20 fm. level, from the engine-shaft, has not yet reached the lode; there is still a great quantity of water coming out of the ground before us, and from the underlay at the surface, where a few feet have been sunk on the back; we are to within 6 or 8 ft. of intersecting it; the ground in the south cross-cut is without any important alteration—driving about 6 ft. a week.—March 9.

SOUTH WHEAL TRELAWNEY.—Smith's engine-shaft is in course of sinking with nine men, ground more favourable than it has been; the strata is a deep blue killas, mixed with mundic—down under the adit about 25 fms. The water is just the same as it has been for some time past.—March 8.

ST. AUSTELL CONSOLS.—We gave the particulars of the recent meeting of adventurers in last week's Journal. The following is the report of Captain John Sampson, then presented:—"After a careful inspection of the mine this day, I beg to inform you, since our report to you on the 2d of Sept. last, we have continued the driving east on Wheal Hawkins lode; during which time the lode continued large, and promised to produce an improvement in every fathom that was driven. We have not as yet driven south to cut the lodes spoken of in our last report, but still consider it advisable to do so. We have continued the driving on Williams's lode, east of Blewett's shaft; and the lode at present has a better appearance than on any former occasion; we are now giving 25s. per fathom only for driving it. We have driven west on the Goffin lode as far as we can go without ventilation; it will be now necessary to sink another shaft for that purpose; and I would recommend that, in the course of six weeks from this time, we commence sinking a shaft on the course of the lode on the gossan, which will be proving the lode as we go down. We are at present driving south from the Goffin lode to cut other lodes, which are known to exist farther south. We sampled 12 tons of copper ore on the 14th inst.—Feb. 21.

TINCROFT.—We have cut the cross-course, in the 100 fm. level, east of new engine-shaft, which I expect we shall soon get through, when we shall have about 4 fms. to drive south to find the lode; the lode in the western end, in the same level, is 2 ft. wide, producing some good quality ore. The lode in the 90 end east is 4 ft. wide, producing some ore, and very promising. The lode in the 80 east is 4 ft. wide, very much improved for tin during the past week, and now worth 15*l.* per fm.; the ground in Palmer's shaft is hard and expensive; the lode in the 80 west is 4 ft. wide, producing stones of ore. The lode in the 70 west is 2 ft. wide, worth 10*l.* per fm. The 60 west is poor; the winzes and stopes are producing fair quality work for ore. In the south mine, in the 142 east, on Highburrow lode, the lode is producing saving work for tin, and kindly. The 120, west from Martin's east shaft, on Martin's lode, is producing about ore enough to pay its own cost; we have commenced driving south to find the same lode to the east of the cross-course; the stopes, in the back of the 120, are all producing fair quality tinstuff. We have now got to the bottom of Wheal Providence engine-shaft, which is about 6 ft. below the 34 fm. level; we shall now have to open a plat in the 34, before we can drive east or west on the lode; we have now three pitches in this part of the mine, at an average tribute of 8s. 9d. from 20s. I hope, by clearing the levels to their extent, we shall find more tribute ground.—March 6.

TRELEIGH CONSOLS.—The 120 cross-cut, north of Christoe's, is driving to cut the lode west of the slide. In the 110, east of Christoe's, the lode is 3 ft. wide, yielding stones of ore only, nothing to value. In the 100, south-east of ditto, we intend to cut the lode which we are driving on in the 110 fm. level. At Garden's shaft, below the 100, we have not taken down any lode this week, the ground as usual. In the 100, east of ditto, the lode is 3 ft. wide, but very little mineral; in the rise, above the 100 west, the lode is 2 ft. wide, with stones of ore only. In the 90, west of ditto, the lode is 18 in. wide, worth 5*l.* per fm. In the 80, west of ditto, the lode is 20 in. wide, worth 6*l.* per fm. In the 70, west of ditto, the lode is 18 in. wide, not to value. In the 60, west of ditto, the lode is 2 ft. wide, worth 18*l.* per fm.; the rise, above the 60 west, the lode is 3 ft. wide, worth 5*l.* per fm. In Wheal Parent adit, east on the lode, the lode is 20 in. wide, producing good stones of ore; the adit north, from Wheal Parent engine-shaft, is to be driven north to cut Wheal Orphan lode, the computed distance to cut it is from 10 to 12 fms., this has a south underlie.—March 4.

WEST WHEAL JEWEL.—In the 57 fm. level, west of Williams's cross-course, on Wheal Jewel lode, the lode is 2 ft. wide, worth 12*l.* per fm.—drove last month 1 fm. 4 ft. In the rise, in the back of the 70 fm. level, west of Williams's cross-course, on Wheal Jewel lode, the lode is 9 in. wide, producing stones of ore—rose 1 fm. In the deep adit, west of Hodge's cross-course, on the same lode, the lode is 6 in. wide, producing stones of ore—drove 1 fm. 5 ft. 6 in. The 20 fm. level, west of Quarry shaft, on Tolcarne tin lode, is suspended; it will be set on tribute as soon as we can make it convenient—drove 1 fm. 4 ft. 6 in.; ditto south, 1 fm. 1 ft. In the deep adit, west of Quarry shaft, on the same lode, the lode is 18 in. wide, worth 6*l.* per fm.—drove 3 ft. 6 in. The stopes, east of Pryor's winze, in the bottom of the adit, on Tolcarne tin lode, are suspended in consequence of the whim-engine having more stuff than she can draw at this time; the stopes will be reset as soon as we can make it convenient—the measurement will be sent in our next report. In the stopes in the back of the 12 fm. level, west of Pryor's winze, on the same lode, the lode is 5 ft. wide, worth 35*l.* per fm. In the shallow adit, west of Quarry shaft, on Tolcarne tin lode, the lode is 18 in. wide, unproductive—drove last month 8 fms. 1 ft. In the 30 cross-cut, south from Tolcarne tin lode, ground favourable for driving—drove last month 3 fms. 0 ft. 6 in.—March 5.

WEST WHEAL MARIA.—The western engine-shaft is down below the 64 fm. level 4½ fms., the ground in which for sinking is improved—I have set 2 fms. to sink in this shaft at 14*l.* 10s. per fm. I proposed to Mr. Brown, on Saturday last, to stope a piece of ground in the back of the 34 fm. level west, on the south lode, to get to Vivian's shaft, on the old mine, as the expense will be trifling, and to drive west on its course, as I am of opinion this south lode of ours is the Wheal Williams lode; they have got the ore on which Mr. Brown agreed to, and I shall resume it to-morrow.—March 7.

WHEAL ADAMS.—We are progressing satisfactorily with the new engine-shaft; thus far the ground and timber are tolerably secure, and we have no reason to doubt it is otherwise from one level to the other. The 50 fm. level having become very wet through the heavy rains, we have been compelled to re-timber a part of it—and have, consequently, been unable to work the pitches in it during the past week; but the operations in them are now resumed. The ground in the 40 fm. level, on the jack lode, is favourable, but the lode itself is small, and not very productive. There is no alteration in any other part of the mine.—March 7.

WHEAL TRELAWNEY.—From the influx of water occasioned by the late heavy rains, we have not made so much progress during the last week in the 62 cross-cut, at Phillips's shaft, as we could have wished—however the ground is favourable, and the men are working spiritedly, and determined, if possible, to cut the lode by the end of this month. The lode in the 52 north is similar to my last report, worth 11*l.* per fm.; in this level south we are opening ground that will pay well for stoping; the stopes in the back of this level are without any material alteration. The lode in the 42 north is improved since my last, worth at present 14*l.* per fm.; the stopes in the back of this level are producing a moderate quantity of ore. The lode in the 32 north is 3 ft. wide, composed of can, spar, and lead, worth 7*l.* per fm.; the stopes in the back of this level are not so productive as for some time past. Trelawney's shaft, sinking under the 42 fm. level, and cross-cut east, are very similar to my last report. At Vivian's, 30 fm. level, the lode is still looking well, worth at present 7*l.* per fm.—March 7.

WHEAL TRESCOLL.—We have not got on quite so fast this week, in consequence of the continued bad state of the weather making all surface operations both troublesome and expensive. It would have been better for the mine had the works gone on more slowly just at this time of the year; but the contractors, being bound under a penalty to complete their several works in a specified time—and that, too, an exceedingly short one—we do not like to break their contract. We have cut a small lode in the western adit, carrying with it very fine stones of tin; but we do not think it at present worth our notice, being in hard ground, and our being also near some of the large lodes, that will pay well for working on, as soon as they are cut; in this adit we are driving three ends at the same time. Should the weather change a little favourable, the contractors anticipate completing it within a week of their time.

FOREIGN MINES.

ANGLO-MEXICAN MINES.—*Guanaxuato, Jan. 3.—Asuncion.*—The following returns show the profit and loss for the weeks ending—

	Memoria.	Sale.	Profit.	Loss.
Nov. 13	$ 515 6 7	$ 1012 2 0	—	$ 9 5 7
20	691 7 11	792 4 0	—	295 5 11
27	471 7 2	1024 3 0	$ 40 2 4	—
Dec. 4	447 3 4	973 4 0	39 2 8	—
11	440 3 0	987 1 0	53 1 6	—
18	456 2 6	2506 5 0	797 0 0	—
24	526 2 3	1268 7 0	108 1 3	—
		$ 1037 7 9		$ 305 3 6
Deduct loss		305 3 6		
Total profit on the 7 weeks		$ 732 4 3		

During the last 14 weeks there were raised 1435 cargas of ore, which, selling for $14,890, gives an average price of $10·37 per carga, which I really believe to be the full value of the ores. The finance statement shows an asset of $24,964.

ALTEN MINES.—The following has been received since our publication of 26th ult.:—

Mining Report from the 10th to the 24th January, 1848.

Raipas.—We are still searching after the lode in the 5 and 10 fm. levels, but, as yet, without success. The lode in Monk's shaft continues equally promising and regular; it has been cut into about 6 ft., without meeting the wall. This shaft is now about 5½ fms. below the 10; and, by the end of March, we hope to commence driving a 20 fm. level on Labouchere's lode. By reference to my old surveys of this mine, I find the distance between our present 20 fm. level and Monk's shaft to be about 20 fms.; it will, therefore, require, at least, 10 months to form the proposed communication, unless we can expedite the work from both places at once, which we shall endeavour to do. In penetrating this piece of ground, we may expect to cut one or more lodes; and the 20 fm. level will also be of great importance for exploring the run and dip of the gaspery slate, which has invariably disordered and cut out the lodes in the deep workings to the westward. The stopes continue good, and the prospects have never presented a more permanent appearance. We have now returned about 160 tons of ore to the smelting-house; but, in consequence of the difficulty experienced in dressing the produce of this mine during the short and dark winter days, the quality is rather below the usual average. We, however, hope that, as the days lengthen, the per centages will improve. The next delivery will be the smalls, which have always been low; and, with these, we cannot, as yet, expect any improvement, in consequence of the difficulty and loss experienced in washing this kind of ore.

United Mines.—No further change has taken place since my last report; the quality of the ore has somewhat improved, but the produce, during the week, will be rather less—the falling off will, however, be comparatively trifling, and will not materially affect the total returns of copper.

Ryper's.—One stope has deteriorated, and its prosecution is, in consequence, for the present suspended. The other has improved, and again holds out more favourable prospects. The produce is still very low.

Mancur's.—The stopes above the adit are poor, and will not pay for working; but an improvement is visible in the side of the old sink, recently resumed, and the tutworkmen are making fair returns of ore.

Michell's continues to yield fair tribute returns; but here, as at all the other mines, the dark days, and great accumulation of ice, have greatly impeded our mining operations.

Old Mine.—Both the returns and quality of the ore are good, and fully answer our expectations; the prospects are also somewhat improved.

Cole's.—A trifling improvement is visible in the stope, but the produce will not, for the present, be much increased. The want of snow prevents us from returning the produce of this mine to the smelting-house.

Quaswig and *New Lodes.*—The further exploration of these mines is unavoidably postponed until the summer: we hope shortly to be able to return the small parcels of ore now on hand at these places. The 3 tons Quaswig ore, in the accompanying delivery note, containing about 15½ per cent. of copper, are produced from the last new lode discovered in that district last autumn; it cannot, however, be properly explored before the spring. We are still without snow, and the ice, in many places, has increased to such an extent, that, in some of the small valleys, only the roofs of the houses are visible. Unless we have a fall of snow soon, I fear we shall all be driven from our dwellings with the ice. The snow covers the surface of the rivers, and prevents the action of the severe frost at any great depth. In the absence of snow, the rivers become a solid mass of ice, with the water continually flowing over its surface, and adding fresh accumulations. In the valley close to our house, the ice is not less than 20 feet thick, and continues to increase.

EXMOOR WHEAL ELIZA COPPER MINING COMPANY.

At a general meeting of adventurers, held at the George Inn, Southmolton, on Friday, March 3, H. Luscombe, Esq., in the chair,

The accounts were examined and passed, showing—Labour cost for Oct., Nov., Dec., and Jan., including merchants' bills, 237*l.* 3s. 9d.—By cash received on account of calls, 132*l.* 16s. 10d.: leaving balance due to the purser of 104*l.* 6s. 11d., the list of liabilities amounting to 72*l.* 17s. 11d.—A call of 1*l.* per share having been made, it was resolved, that after the present month Capt. Pryor be paid six guineas per month; and that Capt. Whitford be engaged as inspecting agent, to visit the mine once a week, and report thereon.

The following reports were then read:—

Exmoor Wheal Eliza, March 2.—In handing you my report from this mine, I beg to say, that since the last general meeting of the adventurers, we have extended the cross-cut about 7 fms. south, in the 12 fm. level from the engine-shaft, and have cut the south lode, which was about 3 ft. wide in the bottom of the level, but not so large in the back; the underlay south, at this point, was about 3 ft. in the fm; since which time, we have extended east and west on the course of the lode about 17 ft. The lode at present does not underlay so fast. We have continued to break some excellent stones of yellow and green copper ore in the bottom of the level; and it appears to me as if we were, what miners term, "scratching the back of a course of ore." I directed the men to put a hole in the bottom of the level, to prove the quality of the lode; and accordingly they brought up some fine stones of yellow copper ore, from the bottom of the present end, as good as I ever saw, which you will have the pleasure of seeing at the meeting to-morrow. I have been down to inspect this discovery. There is a good leading branch in the north side of the lode, and increasing in size as it goes down. I should remark, we have some killas between the north and south parts of the lode, which is diminishing in size as we drive on. I have not a doubt but this will disappear, and we shall have a splendid lode. I should state, we have also driven north in the adit level, and cut through the north lode, which is a large and kindly lode, about 7 ft. wide. To cut this lode in the 12 fm. level, we still have to drive about 14 fms., unless the underlay decreases from the present appearance. If you wish to make a paying mine of this, it is my opinion you must see the lodes at a deeper level. The north lode I should recommend to be seen at the present depth, by continuing the cross-cut from the engine-shaft.—P.S. Since I wrote to you yesterday, there has been a further improvement in the lode; and this day Capt. S. Seccombe has been underground, in company with Capts. Dunn and Moor, to inspect the mine, whose reports will be presented at the meeting.

March 3.—An engine-shaft has been sunk about 12 fms. below the surface, the upper part was on a large and promising lode (north and south course), chiefly gossan, and which appears to have left the shaft at the depth of 4 fms., the dip or underlie being west—and so far as this shaft is sunk, the stratum is intermixed with branches spotted with copper ore; at the bottom of the shaft a 12 fm. level cross-cut has been driven south about 6 fms., through ground of the same character as that in the bottom of the shaft; at the distance of 6 fms. the south lode was reached, and found to be from 3 feet to 4 feet wide in the west end, the south part being composed chiefly of barytes, intermixed with a small quantity of copper ore, and, on the north side, a leader of gossan and copper ore, of rich quality, and much more productive in the bottom part of the end than it is in the back, or upper part, and which is a favourable indication that the lode will improve in depth; the length driven on the course of the lode being near 3 fms. I cannot recommend you to drive much further, at so shallow a depth, believing that you must go down deeper, when I believe a large deposit of ore will be met with. A cross-cut has been driven north in the adit level 12 fms., at which point a large lode is intersected, from 6 ft. to 8 ft. wide, composed chiefly of gossan; this lode appears to dip, or underlie, north, but so little, that at present it is quite impossible to state its true dip; this is a large strong lode, and fully warrants the outlay necessary to lay it open to a greater depth; a cross-cut has been commenced in the 12 fm. level, and driven a few feet; this cross-cut, I consider, would be too shallow, and would recommend you to confine your operations to sinking the engine-shaft, to at least 12 fms. or 15 fms. below its present depth, than to drive cross-cuts both north and south, to intersect the lodes, and lay them open by driving on their course. When the sinking the engine-shaft is to be resumed, the ground that would be required for bearers and cisterns should be cut at the same time—and when down 6 ft. under the present cross-cut, a 15 fm. or 16 in. lift should be fixed, and the 10 in. one now in use to be the sinking lift in future. To have the shaft sunk, and the lodes cut in as short a period as possible, long stents should be contracted for; this, I believe, would induce the men employed to do extra labour, it being very desirable that the lodes should be intersected as soon as possible.

March 5.—Agreeably to directions, I have carefully inspected the above mine this day, and can assure you that nothing can be more obvious than that the lode now in working operation, is the same which was cut in the lobby leading to the wheel-pit; the certainty of this fact is confirmed, from the consideration of its carrying its head 50° south of east underground, which corresponds with the points; where it may be seen at the surface, its

underlay is about 2 ft. in a fm.; its component parts are quartz, iron, barytes, sulphurets, and yellow copper, the latter about 8 in. wide; the lode in the west end, taken as a whole, is about 3 ft. wide, and of the most promising character. I certainly would warmly recommend the immediate prosecution of this end with all possible dispatch; and should Capt. Secombe's views be correct, relative to the great gossan lode in the shaft (which, seems pretty natural to me), the continuation of this end will shortly develope the disputed matter, and prove that this lode is a north and south course, or that it is here by a slide—which of the two I dare not determine, and defy any man to know under present circumstances. The north lode runs about parallel with the former—it is from 6 to 7 ft. wide, composed of the most beautiful gossan; its positive underlay is north, 8 in. in a fm.; this lode is decidedly worthy of almost any outlay had the surrounding strata been equally promising, which, to me, does not assume that appearance. I certainly would not drive north at the bottom to intersect this lode, but either sink the present shaft 10 fms. first (which would only lengthen the cross-cut 7 ft.), or sink a new shaft from the surface, on the course of the lode; in this matter you must be guided by your own circumstances. More splendid indications I never saw; and had the mine been situated in a locality which had proved productive, no speculation could be entered upon with greater certainty of success; but to carry out your purposes, and to accomplish your object, a decidedly improved method must be adopted, and uniformity carried out; suitable materials must be had, and the men must work on contract, instead of owners' account.

COOMBE VALLEY SLATE COMPANY.

The annual meeting of this company was held at the offices, Whitefriars-street, on Monday, the 6th inst.

Mr. Loe, builder, in the chair.

The Chairman, on opening the business of the meeting, wished the gentlemen present to understand that, this being the first annual meeting, it was essential, for the satisfaction of the shareholders, that their manager and secretary should give them a detailed account of the real position of the company, and show forth, in as precise a manner as possible, their future prospects, for which purpose he should call upon Mr. C. S. Richardson, the secretary, to do so.

The Secretary said he felt much pleasure in being honoured with this task, as it afforded him an opportunity of explaining to them why certain parts of the undertaking had not realised what had been anticipated; as also in congratulating the shareholders in his having now, after many months of anxiety and trouble, obtained the great object for which the company was formed—viz.: the possession of Crackington Harbour, and its magnificent quarries. The small quarry on which they have been to work; during the nine months of the past year, presented such promising indications at surface that led him, with others, to be somewhat too sanguine in their expectations of immediately profitable returns; the slate they had raised was now at the water-side, manufactured ready for London; and the slab that had been planed and polished was of a most beautiful kind. They had met floors of this slate from 18 in. to 3 ft. thick, between layers of harda; but the harda being very expensive to remove, and often from 4 to 6 ft. thick, the cost, together with delay occasioned in its being raised, exceeded the profits on the good slate—it being, for any other than building purposes, entirely useless. He now begged to inform them, that the working of this quarry was the mere pretext for the attainment of a greater object; and, although he might be charged with having acted with duplicity, yet he very well knew he should be more applauded than censured when the real merits of the case were fully understood. It would be remembered by some of the gentlemen present that, by a series of misrepresentations, too commonly practised in Cornwall, he had been led to suppose that, by only forming a company, and asking, he could have a grant of Crackington Harbour and its quarries; he had very injudiciously, without any inquiry, incurred for this object a very considerable expense, and which had principally fallen upon himself, when he discovered he had been sadly duped. Vexed at this disappointment, and unwilling to lose his money, he had determined to set vigorously to work, and trace the thing to its source, for which purpose he had ingratiated himself first into the good wishes of the gentlemen of the neighbourhood, and, through them, got an introduction to the trustees, agents, and solicitors of the property in question, and which eventually resulted in an offer from them to grant him a lease of the same, provided he would bring a respectable company forward to their satisfaction. He then formed the Coombe Valley, and commenced the inland quarry on an estate purchased for that purpose about a mile up the valley. He thus planted a stepping-stone, whereby he had been enabled to possess himself direct of the Crackington property. That he had formed a respectable company, could be seen by the books now lying on the table, that showed, in spite of the late monetary depression, only one real defaulter in the company of 41 shareholders, holding collectively 819 shares. That he had encountered many trying difficulties, it was true; but he had pledged his word, his reputation, and his future prospects, on this undertaking. He sincerely thanked the company for the confidence they had reposed in him, without which he could not have succeeded. They were now in possession of the deeds of the Crackington Harbour and its quarries—the real value of which property is, at least, worth 4000*l.* The specimen of slate now in the room is equal to any Welsh quarry (Bangor excepted)—a full description of which will be published in a few weeks in the *Mining Journal*. He had now completed the first part of his task; and all that remained was to put the company in such a position, as to receive a dividend this day next year of 20 per cent.; this he considered the easiest part of his task; and, if they would allow him to direct, every month would prove such a result must follow. He considered what they now possessed was honestly worth 5000*l.*: it had cost them 2047*l.*; and in the course of three years from this time, he hoped to make it worth 20,000*l.*

John Mayhew, Esq., solicitor, informed the meeting, that everything relative to the harbour, &c., had been satisfactorily arranged; the deeds were in his possession, as well as those of the freehold they had purchased; and he congratulated the company on the promising prospects in view for them. They could not do better than follow the advice laid down by their manager, which if they did, he was certain what he had projected would be realised.

Mr. Wonham, of Bognor, Mr. Assiter, of Maidstone, Mr. Malcholm, of Maldon, and others, in addressing the meeting, expressed their satisfaction at the present aspect of the company's affairs.

Liabilities and Assets.

LIABILITIES.			
Labour, 29*l.* 10s.; merchants' accounts, 79*l.* 16s. 4d.	£109	6	4
Rents, 30*l.*; secretary, 23*l.* 12s.	53	12	0
Law expenses for the conveyance of property, 65*l.*; petty bills, 12*l.*	77	0	0
Outstanding claim on purchase of leasehold property	250	0	0
Available balance in favour of the company	1158	15	11
Total liabilities	£1648	14	3

ASSETS.			
Cash at bankers', 204*l.* 2s. 2d.; ditto in hands of secretary, 78*l.* 14s. 7d.	£282	16	9
181 reserved shares	452	10	0
New cottages and buildings, 66*l.*; running bills and unpaid calls, 80*l.* 7s. 6d.	146	7	6
Freehold property	250	0	0
Timber, old and new, and standing	25	0	0
Machinery and quarrying implements	155	10	0
Railways, waggons, ropes, carts, chains, harness, &c.	71	0	0
Gunpowder, carpenters and quarry tools	13	15	0
Mooring chains at the harbour	7	10	0
New castings and machinery, not used, 17*l.* 5s.; 1 horse and 3 donkeys, 12*l.*	29	5	00
Stock of slate and debts due	125	0	0
London office—books, &c.	10	0	0
Alterations and repairs at wharf, fitting up new counting-house, furniture, &c.	45	0	0
Improvements on the estate	35	0	0
Total assets	£1648	14	3

Assumed Value of the Company's Property.

Lime kiln	£120	0	0
Harbour roads	270	0	0
Old saw-mill	35	0	0
Clearing off the overburden at the quarry	350	0	0
Balance	1158	15	11
Lease	3066	4	1
Total assumed value	£5000	0	0

The following resolutions were then passed:—

That a call of 10s. per share be made, to prosecute the workings of the new quarries.

That the accounts, having been examined and found correct, be passed.

That Mr. Malcholm, being a thorough practical man, and well versed in quarrying, as also a trustee, attend, with Mr. C. S. Richardson, the opening of the new quarry.

That none of the reserved shares be sold to the public, unless at a premium adequate to the value of the present state of the company's property.

That arrangements be made for the immediate shipment of slate to London.

Resolved,—That the following gentlemen be appointed to form the board of management for the next half-year:—

Trustees—Thomas Batt, Esq., Coggeshall, Essex.
Mr. William Beard, ditto ditto.
Mr. William Malcholm, Maldon, ditto.

COMMITTEE.

John Spinks, Esq., surveyor, Dorchester.	Mr. Assiter, builder, Maidstone.
Mr. Boxall, builder, Guildford.	Mr. Doubleday, merchant, Coggeshall.
Mr. Mansell, builder, ditto.	Mr. Richardson, jun., builder, Crackington
Mr. Loe, builder, ditto.	Mr. Wonham, builder, Bognor.
Mr. Porter, gentleman, Braintree.	Mr. Bowler, builder, Milford.
Thos. Heathcock, Esq., gent., Sidmouth.	Mr. Ellis, slate agent, Wapping.

Solicitor—John Mayhew, Esq., Coggeshall, Essex.
Secretary and Manager—Mr. C. S. Richardson.

A vote of thanks having been passed to the chairman and the directors, &c., of the past year, the meeting terminated, very much to the satisfaction of every one present.

WEST WHEAL FRIENDSHIP MINING COMPANY.

A meeting of adventurers was held at the Bedford Hotel, Tavistock, on Wednesday, the 8th inst.—John Phillips, Esq., in the chair.—The purser's accounts having been submitted and found correct, were passed, and a call of 1*l.* per share made, payable on the 15th inst.—The captain's report having been read, and considered very satisfactory, it was resolved that it be adopted, and form part of the proceedings of the meeting.

West Wheal Friendship, March 8.—Herewith I beg to hand you the following report of West Wheal Friendship Mine since our last meeting. We have sunk our engine-shaft 3 fms. 3 ft.; the lode now in the shaft is from 6 ft. to 7 ft. wide, composed of spar, mundic, capel, killas, and good spots of copper; also a leader on the north wall, from 9 in. to 1 ft. wide, composed of mundic and good stones of copper. We have also driven our 43 fm. level west 10 fms.; the lode has just the same appearance as in the shaft. I am sorry the quantity of water from the 35 fm. level has hitherto been so great, as to much retard our prosecution; but for which we should have sunk 3 fms. or 4 fms. more than we have; it now being effectually dammed back to its original course, our water in the shaft is very little, and we shall be able to continue vigorous working during the summer months. I here produce some of the stuff coming from the shaft, that the shareholders may judge of our prospects; and, further, shall be happy to receive any agent that the company may like to send for inspecting the progress and prospects of the concern.

[The stuff produced by the captain, as referred to in his report, was found, upon chemical analysis, to be very good copper ore, as was anticipated by many parties practically conversant in such matters, at whose suggestion such analysis was made.]

WHEAL TREHANE MINING COMPANY.

The two-monthly meeting of adventurers was held at the mine, on Tuesday, the 29th ult., when the accounts for October and November were produced, examined, and passed, and a dividend of 1*l.* per share declared. The accounts showed—By balance of last account, 67*l.* 4s. 1d.; lead ore, supposed 46 tons, sold at 15*l.* per ton to the Combmartin and North Devon Smelting Company, 690*l.*—1364*l.* 4s. 1d.—Labour and materials for Oct., 309*l.* 4s.; for November, 342*l.* 11s. 10d.; by dividend, declared Dec. 17, 256*l.*; lords' dues, 44*l.* 8s.—leaving balance in hand, 411*l.* 0s. 3d.

The following report, from Capt. S. Richards, was presented:—

At Kelly's shaft we have completed all the necessary work in the 45 fathom level—in cutting whim and cistern plats, fixing lift, dividing and casing the shaft, &c.; and the shaft is now down 2 fms. 4 ft. below the 45 fathom level—the ground is favourable for sinking. In this level we have driven 3 fathoms on the course of the lode, which has gradually improved in quality from the cross-cut, both north and south. In the north end it is about 2 feet wide, and will produce about 5 per cent. of lead ore per fathom; in the south end the lode is 2½ feet wide, producing about 7 cwts. of lead per fathom; it is a fine looking lode in both ends, and promises still greater improvements. We have driven a longer cross-cut here than was calculated on, and find the underlay of the lode, from the 35 fm. level to this level, to be only 8 in. per fm. The driving north at the 35 fm. level is suspended, and we shall stope the north ground from the bottom of the 30 fm. level, which can be done with somewhat less expense than with driving the 35 end. The lode in the stopes, over this level, is worth 10*l.* per fm. In the stopes, in the back of the 30 fm. level, the lode varies considerably in size and quality; and, altogether, produces tolerably good work. We are still raising a small quantity of very good work from the back and bottom of the 20 fm. level. On Wednesday last, we sampled nearly 70 tons of silver-lead ore, of very rich quality, samples of which are sent to different smelters for their offers for the same.

SLAVERY IN FOREIGN MINES.

Sir,—By Lord John Russell's declaration in the House of Commons, the blow is at last to be struck against the duties on foreign ores: I am surprised to have observed the great interest taken by some of the leading men in Cornwall on this subject; I am more surprised, that men possessing such talent and enlightenment should not at once have struck at the great evil existing in foreign mines, particularly those worked by British capital. The evil I allude to is the slave question—or rather the employment of slaves by British subjects in mines worked abroad by the capital subscribed by Englishmen out of companies formed at home: how praiseworthy would it have been, had Sir Charles Lemon, and the leading men of Cornwall, at once struck at this great root and national evil? The day is not far distant when the whole of the foreign mines must cease working, as it is clearly unconstitutional for British subjects to employ slaves. Although it is not generally known, the whole of the Mexican mines—nay, I may say all the foreign mines (except those worked in our own colonies)—are at the present moment employing slaves, and them in large numbers, who are worked and treated in a most shameful manner, and an eye-witness states, that their treatment is beyond all endurance. I only, a few weeks since, observed the paragraph in your Journal on the St. John del Rey Mining Company, together with the letter of "An Anti-Slaver," in your last week's paper. Can we be living in a civilised country—and a country, above all others, which prides itself upon its freedom, and the excellency of its laws—and, what is more remarkable, for the grand constitutional law, that the moment a slave sets his foot upon British soil he is a free man? For what has the Government for years laboured, but for the abolition of slavery? What has treaty upon treaty been made with foreign powers, but to put an end to that detestable trade, which at the present moment is carried on under the very eye—and, I fear, with the sanction—of the present Government? Who are the parties concerned, and who are lending their aid to oppose the Government and constitution of this country? They are the directors, the managers, and shareholders, individually and collectively, of foreign mines, carried on in this metropolis by men who denominate themselves Englishmen. Is there no House of Commons to petition; or has the present House been petitioned in vain? Is there no one ready to come forward to use their endeavours to abolish the system now carried on abroad by our countrymen? It was only a few years since Sir George Stephens took such a prominent part against a merchant in Moorgate-street, on the ground that he was fitting out ships for the purpose of dealing in slavery. Why was not the great slavery system now carried on in foreign mines thought of? I trust you, Mr. Editor, will lend your columns and powerful aid in supporting this question, and that your able pen will assist the abolition of slavery in foreign mines.—An Anti-Slaver: *Lombard-street, London, March* 7.

WHEAL TRESCOLL TIN MINE.

Sir,—In perusing your valuable paper of the 26th Feb., I perceived a paragraph (written by a correspondent, signing himself "M.," Redruth) of the most weighty introduction, as if there were something of deep importance to follow; but finding that all he stated was in a complicated state, and of a malicious character, I beg again to trouble you with a few brief remarks relating to the above mine. Your correspondent says, that he at all times reads your Journal with interest and pleasure; but it appears that his greatest pleasure is to criticise, so as to fill your columns with anonymous contention and debate; and until his envious heart and prejudiced brain cease from inditing malicious and uncalled-for epistles, legitimate mining can never be brought out with any degree of spirit and confidence. Now, Mr. Editor, I am altogether at a loss to know what your correspondent means by mentioning me as connected with Mr. Richardson's report. I recollect reading a statement made by Napoleon, wherein he says—"I am a lion, but by the same breathing I know how to be a fox." Does he mean to say, that my report is erroneous, and that the lodes and branches are not as I stated in the adit?—or what does he mean? I really thought, by the commencement of his letter, that I should be convinced of some error that I had been guilty of; but in all his long epistle, with his elegant and polished language, he seems desirous to speak out something that would lead the public to believe that my report was altogether erroneous. But stop, Mr. "M."—neither I nor the mine are locked up in a cupboard; remember, truth is like the water—it will have its level; and the lode is visible for any person to look at; and, to go closely into the matter, I beg to say the lode exceeds my statements.

Now, as regards the strata, I stated that it was decomposed granite, but not so much decomposed as to say a pot granite, but rather of a rougher nature, commonly called glounder, which denotes a firmer substance—that is to say, there is a greater portion of quartz than felspar and mica. Now, Sir, I do not wish to intrude on your paper, by stating that I am clear of mistake—no, no; but I beg to say, that all I have stated, respecting the Trescoll Tin Mine, is correct.

Your correspondent seems to make some remarks on the lode supposed to be 2 ft. wide. Now, Sir, my reason for this supposition is, the workings by the ancients are about 3½ ft. wide: I calculated, by an arch left as a prop for the ground, that 2 ft. was the general size of the lode; and of course their reason for making the working wider than the lode, was to have sufficient room to work, the lode being stoped away down as far as they could go for water. I presume every practical miner can understand me in this. Then, again, the caviller mutters at the word "cokel," which is generally found in tin lodes which run in a granite strata; it is a dark substance much resembling wolfram, but much lighter in its nature, and is much easier to be separated from the tin. But your correspondent, to make himself more of a critic, changes the word "cokel" into cockles; he says he has gathered some on the beach at St. Ives; but I think it would be a task for him to learn the difference of one from the other, except by the taste or smell. I have my report before me, wherein I have spelt the word correct; but had it not been the case, would not a gentleman feel it his duty to help the infirmity of the weak, instead of commenting on it. For my part, I have to regret not having had such education as I would desire—still I am led to believe that I distinctly know the difference between cokel and cockles which exist on the sea shore. If your correspondent was endowed with natural good sense, and was at all connected with mining, to any extent, he would clearly understand that the labour of pick and gad is different to that of pen and ink. Still I am inclined to believe that it is possible to instruct a monkey to make a dash with the pen, but you cannot change his natural malicious and crafty habits.

Now, Mr. Editor, I will call your correspondent to the point—that is, what mine have I recommended to the public where there are not the properties of a lode to be seen, as well as a well-defined wall? On the other hand, when have I gulled the public with false statements, so as to fill my coffers with cash by fraud; or, in any shape or form, attempted to do so? Your columns are open for your correspondent's statements, which, I believe, would be just on his part to publish any erroneous statement that has a tendancy to misguide the public; but, on the fact of Trescoll Tin Mine, he had no right to interfere. However, time will unfold the mystery, whether it will be a productive mine or not. Now, Sir, all his swelling letter avails nothing; like Will-o'-the-wisp or Jack-an'-th'-lanthorn, it shines in a borrowed light. However, this may be going too far; but why, then, should a man utter vain language, and fill his belly with the east wind?—or why should he reason with unprofitable talk, or with speeches wherewith he can do no good? J. Spargo.

Down Gate, March 9.

TAVY CONSOLS MINE.

Sir,—I beg to enclose a copy of a letter, from Mr. William Goss, who has lately been appointed managing agent of Tavy Consols Mine, to one of the shareholders, and to request you will insert it, in the next Number of the *Mining Journal*, in order that the public and the adventurers, residing at a distance, may have an opportunity of judging by it of the capabilities of the man elected for this office, which, at the present time especially, it is highly important they should do—inasmuch as the undertaking will, if properly conducted, probably prove a very productive one; and also that the public may be no longer quietly palmed upon by a set of ignorant and designing men, who have lately infested this important mineral district, and done incalculable injury to many of the mines of great promise in it—some of which they have even caused to be abandoned, after a very inadequate trial had been made of them, in consequence of the lavish mode of expenditure they adopted, and their ignorance of the principles of mining operations. I must here, however, distinctly state, that I do not blame the men (be they tributers or ploughmen) who succeed in raising themselves to such positions, as we should most of us endeavour to do likewise, if similarly circumstanced—but the committees and proprietors of these concerns, who are so foolish or ignorant of the necessary qualifications for these responsible situations as to place such men in them. I will not now trespass further on your space, or the patience of your readers, than to add, that I do not pen those remarks from any personal motive; but am induced to do so only to expose what I conceive is one of the principal evils which tend to depreciate this species of property, and to prevent the proper investment of capital in it.—Observer: *Tavistock, March* 7.

"Dear Sir,—Not having seen you for the week I take the opertunity of writing to you to informe you the prosperity of our mine. We have a lode in the 36 fm. level west 5 feet wide solied ore and all to gather the lode is 7 feet wide worth at lest 70*l.* per fathom this may apeare strange to some but no more strange than true. I invite inspection from honest men not men that will sweare that a wite man is a black woman men that will speek the truth, not men that will design their maker not men that Say theare is no ore after Beem and Scola have weighed it. We sampled this day 67 tons 18 cwt. dry ore that is worth moor than 80 last time and next. I will sample 100 tons again and yet this no ore mark befor I manth from this time Shears will make 25*l.* pr shear. I may Say now I have Defeated the great Galta and all the philistins Armey." I have taken the Bull by the horns and the lion by the beard and thanks be to God. I have Consord them all the have made themselves linrs all and the plow boys words will stare them all in the face. I will say it again Tavey is the Great Gumn for forty Eight let them all say what the will then wheare is all the mining wisdom my oponits know I will farfit every sheare I have if it is not worth what I Say to you on this ocasion So I hope you will not sell.—*Devonshire Tavy Consols, March* 2."

WHEAL VINCENT.

Sir,—In answer to Mr. W. W. Mansell's puff of "Tin Vale," in your Journal of the 14th inst., I beg to thank him for his avowal, that he is not, nor ever has been, connected with "Wheal Vincent," and also for giving me the opportunity of contradicting the assertion, if ever made. I would here leave the matter; but Mr. W. W. Mansell has shown so much anxiety to speak about the mine, as well as himself, that I feel compelled to remark upon that portion of his disinterested and truthful epistle—the want of water-power for working Wheal Vincent, and the cause he assigns for the old company relinquishing that mine. Water-power for working the mine, at all seasons, is too well known to be doubted by any one acquainted with the mine; and a very different reason, which I am assured Mr. W. W. Mansell is not unacquainted with, is the true one for the non-existence of the old company. Having said so much for Wheal Vincent, I return to Tin Vale—the burthen of Mr. W. W. Mansell's letter. He asserts, he required *more crushing* power for "*Tin Vale*," to keep *pace with the supply of tinstuff*. Mark the puff: the time Mr. W. W. Mansell speaks of is the 19th of January last; and, if we carry Tin Vale back to that period, the requirements for crushing-power would have been amply met by that which a pair of nut-crackers would have furnished. I entirely differ with Mr. W. W. Mansell, that the materials at Wheal Vincent were purchased to be removed to Wheal Sarah, or for any purpose of removal. I once more thank Mr. W. W. Mansell for the information, that he has not the honour of being personally acquainted with me; and I can assure him, that those whom he is pleased to call his constituency in this town, do not consider me less fortunate in the circumstance alluded to, or a preference shown to them, by the introduction of himself, or his lauded "Pennant"—of which mine, and Mr. W. W. Mansell's connection with it, more hereafter, if he desires it. I have one more paragraph of Mr. W. W. Mansell's letter to allude to—it is puff the third. He says, Capt. Spargo speaks in the highest terms of Capt. Floyd, who has reported favourably of Tin Vale. Really, Mr. W. W. Mansell is an adept at puffing, and, no doubt, promised himself much by bolstering up the reputation of his captain and "Tin Vale;" but it remains to be told Mr. W. W. Mansell, who required the evidence of Capt. Spargo as to the ability of Capt. Floyd, that Capt. Spargo has reported most favourably of Wheal Vincent.

Coggeshall, March 9. John Mayhew.

GREAT WHEAL FREDERICK MINE.

Sir,—I find I am again called upon to reply to the inquiries of two anonymous correspondents upon the subject of this mine. Equally ready am I, with them, to admit the utility of your paper in exposing abuses, and in frustrating attempts at imposition in mining matters; but I am of opinion, that a substantial ground of complaint should first be shown; and I very much question the prudence, or the justice, of publishing attacks upon persons or property, proceeding from parties writing under feigned signatures.

If a man intends fairly, if he be desirous of doing a public service, and if his statements be founded on truth, he will merit the approbation of your readers; he will give his name and address, and the public will then know upon whom to award the meed of praise. But if he be actuated by sinister and malicious motives, and if his statements be framed in falsehood and deceit, he will as certainly screen himself from the consequences of conviction, by shrinking within the folds of an anonymous cognomen.

I enunciate this well-known principle of honesty, because I observe it is forgotten by your correspondents, when they desire to shake the confidence of the public in mining property, wherein they possess no interest. I do not thus preface my reply to their questions because I deprecate their wrath, nor because I desire to evade their inquiries.

I shall now proceed to reply to your correspondents, in the same order as I find them in your last week's Journal. First, then, we have a letter from Mr. Nihil!—a well-selected cognomen! and well and fully shall we find he has verified the old adage—"*Ex nihilo nihil fiat*;" the which, I presume, may be thus rendered in the vulgar tongue—"Out of nothing can *nothing* come." And this *Mr. "Nothing"* hails from the "Hall of Commerce." If he be known as Mr. Nothing *there*, he must, indeed, be null; and useless were it for me, there to seek this personification of nothingness—for other mark or feature he has none. We then find this Mr. Nothing employs a Mr. Nobody, to put him in possession of such facts relative to the Wheal Frederick Mine as would enable him to decide upon the expediency of advising his friends to embark therein. This Mr. Nobody informs Mr. Nothing that he has *inquired* of some party (another nonentity, I presume), and he is *informed* that the mine in question is a *small wedge* of ground between the Caradon Hill and the Phœnix Mine; that there has been *some shoding*—the lode having been opened upon the back *to a limited extent*; that a shallow adit has been driven for *a few fathoms*; that *no tin* has been raised—consequently, none dressed; the *only tin* (this facetiously) having been supplied by the adventurers; that the mine is in a dormant state; and that there is "no machinery"—in fact, "no nothing."

Now this person, but that he says he did not examine matters upon which he reports, reminds me of those who travel from Dan to Beersheba, and say "all is nought;" and his employer, Mr. Nothing, maintains his claim to his self-assumed title, by *seriously* informing you, that he has *thus found out* that "the mine is now dormant, and that there is no machinery;" both of which facts were stated in the reports, in the prospectus, and in the advertisement—so recently published—and with which this Mr. Nothing professes to be perfectly well acquainted. Now, let us discuss the fidelity of Mr. Nothing's description of the mine—the land which Mr. Nothing describes as "a wedge" is a fair and extensive mining sett, comprising three separate and entire tin bounds, wide enough from north to south to contain six or seven well-defined lodes—the which, as now proved by the parallel lodes in the Phœnix Mines, are found in this neighbourhood to be copper lodes in depth, carrying tin upon the backs. From east to west, and in the run of the lodes, the sett, I should think, is above three-quarters of a mile—space enough, I should fancy, to satisfy any ordinary man. Instead of *a shallow adit driven for a few fathoms*, there are two deep adits—the one I think about 160 fms., the other about 60 fms. The backs of the lodes have been worked out by the "old men," and some hundreds of tons of tinstuff must have been returned therefrom. This is provable by the deep burrows, and by the remains of not less than 10 or 12 stamp houses upon the sett, which were all, in those olden times, employed in stamping tin broken from the backs of these lodes. The backs of the lodes throughout the sett show these extensive burrows, which Mr. Nobody is pleased to call, or which he really has mistaken for, "shoding pits!" Can this be ignorance? If Mr. Nobody be conversant with tin districts, he must know that *burrows*, such as these, are not mere *shoding pits* to trace the course of lodes, but that they are the surest indications of extensive and profitable workings by the first discoverers of our mineral wealth, whose *leavings*, below the levels at which the lodes could be unwatered without machinery, have even afforded the most profitable employment for the capital of the modern adventurer.

In the floors of the adits which I have previously named, and in other pits, large bunches of tin are gone down—they can easily be seen; and the mine now only waits the erection of the water-wheel and the machinery named in the prospectus, to enable us to sink and drive upon extensive courses of tin, in numerous directions. I purchased this mine two years ago, under the advice of an agent, upon whose opinion I have much reason to depend. I have conducted the researches entirely at my own cost. I consider the outlay now named as further required, and attempted to be provided in the sale of 500 shares at 2*l.* per share, would make returns in tin; and that these lodes, or branches, on the back falling together in depth, would form two or more copper lodes in depth, and present a very important feature in that district of the Caradons.

Then comes the letter of Mr. D. L. W., a gentleman of Wales. He is astonished at my presumption in asking 4000*l.* for the mine, or at that rate. To that part of his letter I must reply, that it is *my acknowledged occupation* to take or purchase setts of ground, where I consider there may be extensive mineral deposits. I never offer such property in shares until I have made such researches as I consider necessary to develope the lodes. This is often an expensive operation. *If I am successful*, I invite attention to the discoveries; and I ask such remuneration, in the price I affix to the shares, for the outlay of capital, and for my own personal exertions and knowledge, as the discovery appears to justify. I have opened lodes at a cost of 10s. per share, which have been immediately valued, by the best agents in Cornwall, and purchased under their recommendation, at upwards of 20*l.* per share. I readily admit the justice of denouncing the practice of asking or imposing a large bonus *where nothing has been done*; but I contend, that we are fairly entitled to the full value of any discovery which may be the result of our outlay and exertions.

There is another point to which I must direct your attention. Mr. "D. L. W.," taking up the complaint of "Vox," says—"I have admitted that I attended the meeting at Tavistock alone." The paragraph appears to me much like a paradox, and it is false. I said, "the meeting was unattended by any of Mr. Crossman's friends; but, were it even as 'D. L. W.' states, does it concern the gentleman in Wales?" Again, he questions the honesty of the agent, who introduces to his friends property, upon which he has received so large a commission. I must tell your correspondent, whether he be one of those friends or not, that such excessive commission had reference to, and grew out of, other arrangements, with which the purchasers in Wheal Frederick had nothing to do; and the shares would not have been sold to them, or any other parties, at a lesser price than 2*l.*, had no agent been employed. It is not necessary, nor is it fair, that I, at the risk of being charged with concealment, which might affect the value of the property thus wantonly attacked, should be forced, by impertinent questions, to disclose matters of private arrangement in no wise affecting the public. The purchase-money was mine. Have I not a right to do as I will with mine own? Is the Welchman's eye evil because mine is good? The purchasers in this mine have not suffered wrong; but wrong has been attempted upon me, and upon the property, by the attacks of your correspondents. If they really have no interest in the mine, they have, at least, exhibited much impertinent curiosity, in demanding, and in forcing from me, by questions—that, which, if unanswered, would have been construed into admitted charges—particulars which concerned them not. If they be shareholders in disguise, a more legitimate course was open to them; and they certainly appear to be very striking personifications of the desperate politician in Hogarth's picture, who bestrides the elevated sign-post which he attempts to cut asunder, unmindful, in his rage, that, in such act, he compasses his own downfall and destruction.

I have now answered all the inquiries of your correspondent, and I hope I shall not be again troubled upon these points; I cannot, however, close this discussion, without noticing the remark of your correspondent—that my former letter appears more like an advertisement for young mines than a reply. I contend I have a right to maintain the character of the property so assailed, to show the liberality of the terms I propose in the sale of its shares, and that such a course was rendered absolutely necessary, in consequence of such attack. Persons not aware of the *movements behind the scenes*, would naturally suppose that such an attack could only proceed from unfair proceeding on my part, or from the utter worthlessness of the mine.

You and your readers well know, that a charge made *in a few words*, or a jeer, or an innendo thrown out, require *columns of explanation* to obliterate or refute. This *attack* has been intended to effect an injury upon a promising and valuable property, which has cost me hundreds of pounds; and therefore it is that I have assumed the right, by a plain statement of the position and prospects of the mine, to meet such charges in *all their varied forms*, even at the risk of trespassing upon the space usually afforded in your valuable publication.—Frederick S. Thomas: *March* 1.

[This letter was unavoidably omitted in our last week's Journal.]

GREAT WHEAL FREDERICK TIN MINE.

Sir,—Hearing so much said about this mine from time to time, and seeing your valuable columns occupied by letters of a contradictory nature, I beg to hand you the real facts as to the length and breadth of the sett, and the general character of the mine. It is true the mine is situated in the parish of Linkenhorn, to the north of the Caradon Hills, on an estate by the name of Dunsley, south of the Penlee Mine. This sett is about three-quarters of a mile in length, and as to its breadth, I must say it is rather narrow; but, perhaps, your correspondent did not take particular notice of the horizontal bearing of the lodes, or their underlay—if so, I am certain he would not scruple at the narrowness of the sett. The lodes underlay about 3 ft. in a fm.; and as they run to the north

extremity of the sett, it will take a shaft 260 fms. deep to intersect the lodes at the south extremity of the sett; therefore, if the sett had been double the breadth, it would be of no profit to the adventurers. Great Shilstone's lode unites the sett, from which there have been some hundreds of pounds worth of tin risen from the back of the adit; and there is a bunch of tin gone down in the bottom of the same for upwards of 15 fms. in length; it will take a shaft 300 fms. deep to intersect this lode to the south extremity of the sett. As to the character of the mine, and whether it is worthy of an outlay of 900*l.* to erect machinery, I will leave it to those who are able judges, to form their own opinion. I can only say this far, that the above-mentioned lode is gone down under the adit upwards of 5 ft. wide, and is all taken away above the adit for tin, for scores of fathoms in length. The lode gone down is judged to be worth 7 cwts. of tin to 100 sacks; it was last worked by the late Capt. Hooper and his father, about 30 years since; and about 24 years since, I and Capt. Hooper descended the shaft, so as to discover whether there was any possibility of getting at the tin without machinery—if so, we intended to have worked it on tribute, as Hooper knew the value of the lode; but finding the water was pooled up by a run in the adit, we were unable to accomplish our design. However, it is a well-known fact, that there is a rich lode of tin gone down, and it cannot be got at without machinery. There are two other lodes—one about 50, and the other 60 fms. north—the backs of which are in the Penise sett; but, by the underlay of 3 ft. in a fm., they come in this sett about 10 and 25 fms. deep; these lodes are also taken away by the ancients so far down as they could go down for water, and there is every reason to expect they will turn out very productive—especially as they come in contact with the granite, which will be about the central part of the sett. As to the arrangements made by Mr. Thomas, I know nothing—the only thing I can say is, the money that has been spent in the mine, I received from Mr. Thomas. We have driven many fathoms, and sunk a shaft 12 fms. deep, but was unable to sink any farther, on account of the water. We cut a lode that we did not expect, and drove a few fathoms on it, and broke excellent stones of tin; but the water being so powerful, we were obliged to abandon it. Since that, we have been driving around the run in Shilstone's adit, and we calculate to have 5 fms. more to complete it; we expect then to be able to get at the bunch of tin farther to hill. The mine is now idle, and has been for some weeks past; and there is also about 30*l.* owing, which is but a mere trifle. I believe the mine will ultimately prove productive, so as to amply reward the adventurers for such trifling outlay.—J. Spargo: *Deers Gate, March* 9.

GREAT WHEAL FREDERICK MINE.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—Mr. Thomas has conferred with us in reference to some recent publications in the *Mining Journal*, injurious to his interest in the above-mentioned mine; and, under his instructions, we have commenced legal proceedings on account of those publications. We have thought it right to give you this intimation, as a reason for your receiving no further communication from Mr. Thomas on the subject of the publication in question; and we have only to add, that Mr. Thomas will now submit the matters to the consideration of a jury.—Perhaps you will think it right to publish this communication in your Journal to-morrow.

We are, Sir, your most obedient servants,
Dean, Leeks, Dixon, & Redpath.

[We have no other remark to make on the notice of Messrs. Dean and Co., than to state, that we are in communication with the writers of the several letters, and shall be enabled to announce the result in our next week's Journal. We may, however, add, that Mr. F. S. Thomas must give us credit for acting with perfect fairness in the matter, and with more courtesy than himself—inasmuch, as we have not only devoted some considerable space in our present Number for his reply to the statements complained of, but also inserted a further report on the mine from Capt. Spargo.]

East Wheal Rose.—By balance of last account, 3028*l.* 8s. 10d.; Nov. proceeds of lead ore sold 12th, 2452*l.* 5s.; 27th ditto, 2671*l.* 15s. 7d.; Dec. 10, 2145*l.* 2s.; 24th ditto, 2470*l.* 7s. 7d.; 31st ditto (Oxman's), 493*l.* 12s. 7d.; ditto (North Wheal Rose), 353*l.* 16s.; Cargoll adventurers, for supplies, water charges, &c., 517*l.* 13s. 11d.; ditto, for three-fourths of profit for Nov. and Dec., 1536*l.* 2s. 7d. = 15,668*l.* 16s. 1d.—To costs for Nov., 2361*l.* 13s. 9d.; surgeon and club, 34*l.* 7s. 6d.; cost for Dec., 2247*l.* 2s. 7d.; surgeon and club, 32*l.* 0s. 6d.; bills those months, 2240*l.* 1s. 5d.; coal ditto, 300*l.*; income tax, 100*l.* 12s. 3d.; dues, 692*l.* 6s. 3d.; waywardens of Newlyn, 50*l.*; by dividend of 40*l.* per share, 5120*l.* = 13,178*l.* 15s. 3d.: leaving balance, 2490*l.* 0s. 10d.

Fowey Consols.—At a meeting of adventurers, the accounts for Sept., Oct., Nov., and Dec., were examined and passed, showing—By balance at end of Aug., 8154*l.* 17s. 4d.; ores sold, 13,656*l.* 4s. 10d. = 21,811*l.* 2s. 2d.—To costs, &c., 14,112*l.* 6s. 9d.: balance in favour of adventurers, 7698*l.* 15s. 5d.

North Pool.—A meeting of adventurers was held at the mine, on Tuesday last, when the following accounts for Nov. and Dec. were examined and allowed, and a dividend of 15*l.* per share declared:—By balance at end of Oct., 480*l.* 8s. 9d.; ores sold (less dues), 3385*l.* 11s. 7d. = 3865*l.* 15s. 4d.—To costs for Nov. and Dec., 1845*l.* 17s. 10d.; dividend of 15*l.* per share, 1500*l.* = 3345*l.* 17s. 10d.—Balance in favour of adventurers, 519*l.* 17s. 6d.

South Wheal Francis, March 6.—By copper ores sold 2d December, 1813*l.* 0s. 11d.; ditto, 6th January, 2876*l.* 9s. 1d.; tin ores sold 3d March, 300*l.* 18s. 4d.; deduct 1-15th dues, 332*l.* 13s. 10d. = 4657*l.* 14s. 6d.—Labour cost for Dec. 1847 and Jan. 1848, 1564*l.* 17s. 10d.; merchants' bills, including balance of engine, 1803*l.* 5s. 10d. = 3368*l.* 8s. 8d.: showing profit of 1289*l.* 10s. 10d; add balance in hand to end of Nov., 1847, 260*l.* 14s. 3d = 1550*l.* 5s. 1d.—By dividend declared this day of 10*l.* per 1-124th share, 1240*l.*: leaves now in hand, 310*l.* 5s. 1d.

South Wheal Trelawney.—A meeting of shareholders was held yesterday (Friday), the 10th inst., at the office of the company, in accordance with the notice convening the same.—Charles Chippendale, Esq., in the chair.—The accounts submitted presented a balance of 118*l.* against the company, to cover which, and for further operations, a call of 50s. per share was made.—Capt. Lean's report was read, by which we learn, that the shaft will be completed to the 80 fm. level, and the lode cut, about Midsummer next.—[We are not prepared to publish the report this week.]

Wheal Lovell.—At a meeting of adventurers, held at the mine, yesterday week, the accounts, of which the following is an abstract, were passed:—To balance from last account, 4291*l.* 16s. 5d.; cost, &c., for Oct., Nov., and Dec., 3047*l.* 12s. 9d. = 7339*l.* 9s. 2d.—By ores sold, 4684*l.* 13s. 3d.: balance against adventurers, 2654*l.* 15s. 11d.

Wheal Margaret.—Account to end of December, 1847:—By tin sold, 3156*l.* 7s. 3d.; balance at last account, 1078*l.* 13s. 6d. = 4235*l.* 0s. 9d.—Labour cost and carriage, 1981*l.* 14s.; coals, 187*l.* 16s. 4d.; lords' dues, 127*l.* 13s. 5d.; merchants' bills, 612*l.* 6s. 4d.; on account of steam-stamps, &c., 250*l.* = 3159*l.* 10s. 1d.: leaving balance, 1075*l.* 10s. 8d.; deduct dividend, 896*l.*; balance in favour of adventurers, 179*l.* 10s. 8d.

ACCIDENTS.

Great Polgooth Mine.—A young man, named Tonkin, fell out of the ladders to a depth of 30 fathoms, and was so severely injured, that little hopes are entertained of his recovery.

United Mines.—R. Webster was killed on Tuesday last, by falling down the mine, a distance of upwards of 400 feet.

South Wheal Francis.—W. Gundry met his death by falling into a shaft from the 60 to the 70 fathom level, whilst handing some timber from one part of the shaft to another.

Balleswidden Mine.—T. Eddy and R. Tonkin were suffocated under a large mass of ground, which fell and buried them whilst at their labour in the 70 fm. level.

Levant Mine.—As a miner, named Grenfell, and his son, were passing through one of the levels, they came in contact with the tram-waggon, when Grenfell, in endeavouring to save his son, broke his own leg, and is now lying in a very precarious state.—In the same mine, and on the same day, a boy fell out of a ladder, and was precipitated 11 fms., but received very little injury.

Murton Pit, Durham.—J. Holmes was killed by a quantity of stones falling from the roof.

Ludworth Colliery.—Joseph Farrow, deputy overman, was crushed by a part of the roof falling upon him. The place was considered perfectly safe.

Blaina.—A poor man, named John Price, collier, was killed in the Cwm Celyn three-quarters coal-pit, by the top falling upon him. He was taken out quite dead.

Pontypool.—On the 3d inst., a poor fellow, named T. Gregory, was killed by a fall of mine and rubbish in the Race level. The deceased had but recently resumed his work, after a severe fit of illness.—*Monmouthshire Merlin.*

Benton Quarry, near Newcastle-upon-Tyne.—As the quarrymen were engaged blasting rock, on Monday last, a considerable explosion was effected; and while they were removing the fragments in the usual manner, a large mass of stone with its capping of shale suddenly fell, and descended like an avelanch on the men below—eight were killed, and several others very severely injured.

Hall Park Colliery, Bilston.—Two colliers, named Green and Dodd, foolishly got upon the water-barrel, at the bottom of the shaft, for the purpose of going up the pit. It, however, went steadily all the way up, and when they got to the top, the banksman pushed the waggon partly over the pit; but, finding that the engineman had not drawn the barrel quite high enough to enable him to push the waggon completely over, he called out twice to the engineman, "pull up." The engineman mistook this direction for a request to "short"—that is, to let the barrel a little lower down; and, as it lowered upon the waggon, the barrel tilted on one side. Dodd, who was on the side that tilted, fearing the barrel would fall against him, jumped off upon the side of the pit; but Green, who was on the opposite side, either jumped off, or was thrown off, the barrel, and fell to the bottom of the pit, which is upwards of 100 yards deep. The deceased was shortly afterwards brought up the pit quite dead. Dodd escaped uninjured.

Graveland Old Colliery, Rowley.—C. Spinks was killed here by a fall of coal.

Fatal Accident at Balleswidden.—We regret to state, that on Wednesday last, T. Eddy and W. Pensluna, met with their deaths at this mine. It appears that they worked upon tribute in the 70 fm. level; and for the preceding three days had proposed to take down a rock, but did not do so, in order to obtain the tin beneath it. On Wednesday, however, while in the act of removing the rock, it fell, and buried them. We understand that orders were given not to work at the place where the accident occurred.—*Penzance Jour.*

Bunn's Lane Colliery, Dudley.—J. Turner was killed by a fall of coal.

The Fatal Boiler Explosion at Blue Pitts, near Rochdale.—The adjourned inquest was held at Manchester yesterday, respecting the deaths of four young men, who were killed by the explosion of a steam-boiler, the particulars of which have already been published. Mr. Nasmyth, of Patricroft, gave it as his opinion, that the boiler had had too much pressure. It appeared, by other evidence, that when the explosion took place, the gauge was at 14 in.—It had usually been worked at 18 in. pressure. Mr. Robert Wilkinson, engineer at the Lowmoor Company, near Bradford, where the engine was made, said that the engine, when made, was not intended to work at more than 6 in. pressure. In 1843 the boiler was repaired, and two stays put in it; and of late it had been worked at 18 in. pressure, and previous to the stays being placed, it had been worked at 12 in. pressure. There was no evidence to show that Mr. Walker, or the manager at the mill, were at all implicated, but that the management of the engine had been left to the engineer, who was one of the four men killed. He had been engineer about six months, at 14s. per week wages; he had been fireman 12 months previous to that. The fireman had had his situation only three weeks, at 10s. per week wages. The jury returned the following verdict:—"That William Wild and the others came to their deaths by the bursting of a steam-boiler, the stays of which were insecure; and it is the opinion of the jury, that two of the cotters were out at the time of explosion. The jury are also of opinion, that the boiler was never intended to sustain the pressure to which it has been subjected for some time back."

Dreadful Explosion—Four Lives Lost.—We regret that an accident, attended with loss of life, took place at the malleable iron-works of Messrs. Murrays and Buttery—the Monkland Iron Company—near Holytown. The River Calder passes there through a deep ravine; on the right bank a rolling-mill was erected about five years ago; and, to meet the increased demands of railways, another was erected and put in operation during last summer. It is understood to be the strongest in Scotland, and of a very powerful description. Both mills were in full operation, and all hands were at work in them at seven o'clock yesterday morning, when suddenly a fearful explosion was heard. It proved to be the great boiler of one of the steam-engines—about 80-horse power—of the new rolling-mill. The boiler was blown into the air; and, flying across the river, it descended through the roof of the older mill, spreading devastation all around. Mr. Buttery was instantly at the spot, who sent for medical aid, and gave prompt directions for everything useful for the relief of the surviving sufferers. The sheriff and procurator-fiscal of the Airdrie district were sent for, to investigate the cause of the accident. Four dead bodies were found, much mangled; and several other men received severe injuries. The man in charge of the boiler is unhurt.—*Edinburgh Advertiser.*

Explosion of Fire-Damp in America.—An English miner, named John Jackson, employed in the mines of Messrs. Mann and Williams, at Mount Laffee, was so much injured by an explosion of fire-damp, which occurred the week before last, that he died on Saturday last, aged about 40 years. He leaves a wife and six children in England, whom he sent for about six weeks ago; and they are, perhaps, even now making arrangements to meet him here—little expecting the wreck which awaits their hopes! This life is, at most, a fitful thing.—*Miners' Journal*, Feb. 12.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

We understand that some highly influential parties have taken up the Antimony Mines at Tregear, in the parish of St. Kew. These mines were discovered last autumn, since which considerable quantities of antimony ore have been raised and sent to London. I lately visited the mines, and made a personal inspection of them; the stones of solid antimony are extremely remarkable, not only for their size, but also their beauty. I have since seen several of the stones of ore raised from these mines at the offices of the company in Lombard-street, and they are well worthy of an inspection from the mineralogist, and parties connected with mining. The lodes were large, and apparently productive; the miners were sanguine of large returns, which I think strongly will be the case, and it is considered in the neighbourhood a first-rate adventure.

Tavy Consols.—Several shares have changed hands this week from 10*l.* to 12*l.* 10s. I am not aware of any that can be got for less than 15*l.* at this time; in fact, shares are cheap almost at any price, if things continue to improve as they have for the last two months. They had a lode in the end of the 36 last Friday (I was on the mine), worth 100*l.* per fm.; and the captain writes this day to say, "If possible the lode is better than ever."

We received the following report, &c., by this morning's post:—

TAVY CONSOLS.—The lode in the 36 fm. level west is as good as ever—in fact, I may say, it is improved, if possible, from last week, and is good enough; the leader of solid ore is 5 ft. wide. We have an excellent lode in the shaft, not quite so good as the end; but I think it will soon be as good, as the dip of the ore is east, and it is best in the west end of the shaft. The pitches in the 12 fm. level are all looking well, and we have let a new pitch in the bottom of the 12 fm. level, close to the cross-course. We have holed from the 24 to the 12 fm. level, and have set six men to drive on the lode in the 24, west of the cross-course, and two men to drive on the lead lode north, to cut the north copper lode, which I calculate is now about 2 fms. north of the end—altogether, the mine looks exceedingly well.—W. Goss, Captain: March 9.

— Shares are in demand, and many have changed hands—10*l.* is freely offered; but no sellers to be found at the price.

— Tavy Consols Mine was commenced in the latter end of 1845, but very little done until January, 1846, since which the shaft has been sunk 37 fms. below adit. The adit level, on the 12 and 24 fm. levels, is driven west to the cross-course, or lead lode. All necessary machinery is erected—viz.: a 40-ft. water-wheel, with flat-rods to pump the mine; a grinder-house, stamps, jigging-machine, and drawing-machine, which are all worked by a 24-ft. water-wheel; floors laid out, and every convenience for working to a depth of 120 to 150 fms.; the cost to the shareholders has been 4*l.* per share. Already the mine has returned 300*l.* worth of ore, and is likely, from present appearances, to be a great and lasting mine; the next level will be opened about July; the shaft is 10 ft. long by 6 ft. 6 in. wide, and is sinking at 17*l.* per fm., and the last 2 fms. gave the adventurers 30 tons of ore. The mine is altogether out of debt, except the current expenses, and only one call, of 5s. per share, has been called since Midsummer last.—No further call will be wanted, from present appearances; but the shareholders may fairly calculate on a dividend within a few months, as every day is laying open tribute ground, which will soon be available for stoping.

[From the *Plymouth Journal.*]

Wheal Franco.—A general meeting was held on Wednesday last. The committee reported that they had cash in hand 386*l.* 9s. 4d., of which 354*l.* 12s. 3d. had been a profit, realised during the last four months. In addition to this, about 600*l.* worth of ore has been shipped, but is not paid for; another parcel of about the same value (600*l.*), is also ready to be shipped, and there is in addition, at grass, not dressed, about 600*l.* worth more; so that there is about 1800*l.* worth of ore which has not, of course, been brought into the committee's cash account. There is a good lode in east of the cross-course, the 47 fm. level—indeed, better than could have been expected; also, in this level, to the east of the cross-course, there is a good orey lode, which is daily getting more settled. The lode in the 62 fm. level has been hove by a slide, and has consequently been cut much sooner than was expected. On the whole, the prospects of the mine never were so good as they are at this time.

Plymouth Wheal Yeoland.—The eastern and western levels have considerably improved since the general meeting. The sump is being sunk perpendicularly in the country—consequently nothing will be developed by the sinking of this engine-shaft until a cross lode has been driven, and the lode cut in the 22 fm. level. The new south lode is very rich.

Birch Tor.—Seven tons of tin are dressed and ready to be sent off.

Exmoor Eliza.—In this mine the lode has been cut in the 12 fm. level. This mine certainly is amongst the most promising of the growing speculations.

Wheal Anderton.—In the 70 east, lode very much improved, and is very good.

Wheal Ash.—In the sump there is still a large course of mundic, mixed with spar, &c.

Wheal Trehane (near Liskeard).—This promising little mine sampled 70 tons of silver-lead ore last week, for which 22*l.* 10s. per ton had been offered up to Saturday, but all the tenders had not then been received.

Wheal Calstock.—Another lode has been cut in the deep adit level, and the intersecting of the lodes at the point of junction of several lodes is anxiously looked for.

Hawkmoor.—This sett is again taken, and is to be shortly set to work in 128 shares.

East Caradon.—A correspondent writes us, that an improvement has taken place in the prospects of this mine, within the past few days, in the lode at the bottom of the shaft, about 6 fms. under the adit.—*West Briton.*

Balleswidden Mine.—The *Penzance Journal*, referring to the meeting of adventurers in this mine, the particulars of which appeared in last week's *Mining Journal*, says—"Although there has been a profit during the two months of 24*l.* 1s. 6d., the extremely low price of the produce of the mine at the present moment, has, we are sure very reluctantly, compelled them to decide upon calling a special meeting, to be held on the 21st inst., for the purpose of taking into consideration the propriety of suspending all workings on the mine from that date, until such an improvement shall take place in the price of tin, to enable the mine to be worked with a profit to the adventurers. This is, indeed, sad news. We regret it exceedingly; and hundreds, nay thousands, of the inhabitants of the far west, will feel it most severely, if such an event shall come to pass. At this extensive mine, there are no fewer than between 700 and 800 persons (whose wages for Nov. and Dec. amounted to 3215*l.* 10s. 2d.) constantly employed, and certainly not less than 2000 persons dependent upon those 700 or 800 for daily support, to say nothing of the indirect benefit of the mine to the parish of Saint Just, and town of Penzance. But while we deplore the circumstance that must inevitably lead to such a result, we can hardly expect the spirited adventurers to carry on so large and expensive a concern, involving so great an outlay, under present auspices. Sure we are that the adventurers, one and all, will equally regret to be compelled to resort to such an alternative. We trust, however, that before the period named for holding the meeting shall arrive, the price of one of the staple commodities of the county will have improved, and that we may have—"a better price for tin.'"

Monmouthshire.—The colliers are still out, and there is not the slightest probability of their resuming work for some weeks. Trade is very dull at Newport, and vessels which have been lying in that port for weeks, expecting cargoes, are leaving to seek for freights elsewhere; added to this, a new poor-rate of 2s. in 1*l.* has been granted, which is very much disapproved of by the inhabitants of that town.—*Cambrian.*

The Railway Share Case.—Mr. Field, jun., of the firm of Field, Son, and Bayley, attended the Court of Aldermen, on Tuesday last, relative to the complaint made against him by Mr. Horatio Folliott Nelson, at the last court, the particulars of which appeared in the *Mining Journal* of the 26th of February. Mr. Nelson was in attendance, but the learned counsel for the complainant and respondent were both engaged in cases in the courts of law. A solicitor appeared upon each side. Mr. Field put in a statement of the circumstances connected with the transactions in Wexford, Waterford, and Valentia shares, referred to in the complaint against them of Mr. Horatio Folliott Nelson. Upon the part of the complaining petitioner, application was made to adjourn the case until counsel should be able to attend. Mr. Field, however, earnestly entreated the members, for the sake of his character, which had already suffered by the statements made against him, to take the matter at once into consideration. The court was soon afterwards cleared, and, after a short deliberation, the aldermen came to (as we were given to understand) the almost unanimous resolution not to put the bond of Mr. Field, jun., in force. The respondent was called in, the doors were opened, and the town-clerk read the decision of the members, which was to the following effect:—"The court, considering the circumstances of the case, do not think it necessary to put your bond in force."

A beautiful iron ship, the *Britannia*, was launched from the building-yard of Mr. T. D. Marshall, at the Low Sands, South Shields, on Wednesday last, amidst the acclamation of hundreds of spectators. She has been built for a company at Hamburgh.—*Durham Advertiser.*

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, *Saturday morning, Eleven o'clock.*

Bank Stock, 9 per Cent., 193	Belgian Bonds, 4½ per Cent., 60 5 1
3 per Cent. Reduced Ann., 80¼ ⅛	Dutch, 4½ per Cent., 70⅜ 1 69
3 per Cent. Consols Ann., 80⅛ ¼	Brazilian, 5 per Cents., 79
3 per Cent. Annuities, —	Chilian, 6 per Cents., 88½
3½ per Cent. Ann., 91⅛	Mexican, 6 per Cents., 14½
Long Annuities, 9⅛ ⅛	Spanish, 5 per Cents., 19 11⅛
India Stock, 10½ per Cent., 232	Ditto 3 per Cents., 22⅞ 3⅛
3 per Cent. Consols for Acc., 80⅛ ¼	Portuguese, 5 per Cents., 73 5
Exchequer Bills, 1000*l.* 3d., 29 25 29 pm.	Russian, 5 per Cents., 97 5

Mines.—The business in the mining share market has been very limited during the week, and few shares have changed hands. Several inquiries were made relative to our leading mines, but they generally led to no *bonâ fide* transactions.

From the reports received from our country correspondents during the week, we find that the mines generally are in an improving position; at the same time, a considerable gloom pervades, from the continued depressed state of the standard for copper ore, and the fall in lead and tin, which affords but little encouragement to adventurers generally.

From the improved position of Levant, Botallack, West Tolgus, these shares have been inquired for during the week; and those mines referred to in our last as having improved, are represented as still progressing.

Trehane two-monthly account was held on the 29th, when a dividend of 1*l.* per 256th share was declared, being the sixth dividend within the past 12 months. Since the meeting, 70 tons of silver-lead ore have been sold, realising 22*l.* 8s. per ton.

East Wheal Rose account for Nov. and Dec. was held on the 6th, when a dividend of 40*l.* per 128th share was declared, reserving a balance of 2490*l.* in the purser's hands. The produce of the sales of silver-lead during the two months amounted to 10,586*l.*

Wheal Margaret bi-monthly account, held this week, declared a dividend of 8*l.* per 112th share, reserving a balance of 179*l.* in the hands of the purser.

South Wheal Francis two-monthly meeting was held on Tuesday, the 6th, when a dividend of 10*l.* per 124th share was made; the balance in hand 310*l.*, after payment of the balance due for the new engine, which went to work on the 7th instant.

The directors of the Alten Mining Association, at their meeting held on Thursday, declared a dividend of 5s. per share, payable on Monday next, the 13th. The directors entertain the propriety of securing an extensive mineral property, known as the "Quœnangen Mines," situate a few miles from the Alten Mines. It is quite evident, from the intelligent and comprehensive reports furnished by experienced agents in the country, that this property would prove a grand acquisition to the Alten Mines; for, exclusive of the superior practical ability which this company possess in their local management, the knowledge of a large number of apparently productive lodes on the sett, and the advantages which will be derived from the smelting department at Alten, must render it obvious that any omission in not securing immediately the Quœnangen Mines would be highly culpable on the part of the company. We learn that a large proportion of the shares are already subscribed for.

We are gratified to learn, that arrangements have been made for the immediate resumption of the East and South Tamar Mines. The enterprising character and business habits of the gentlemen composing the board of management are, in our opinion, a guarantee that these mines will be conducted with economy and judgment; and, from the general prospects which these setts present, we fully anticipate a satisfactory and profitable result.

The share-list of East Wheal Friendship is also represented to be nearly completed; and that active measures will be immediately adopted for commencing operations. From the opinions expressed by those so well qualified to give a report on the mine, we have no hesitation in stating our belief, that the sett is worthy further trial.

Wheal Franco meeting was held on Thursday, the 8th inst. By letters received, we learn that no dividend was declared—the balance in hand being about 350*l.*; but, for ores sold, for which the bill will become due in course of a few days, 600*l.* more will be carried to the credit of the adventurers.

The annual meeting of the Patent Alkali Company was held on Thursday last, at the offices of the company, Fenchurch-street. The directors' report represented the last year's proceedings as most highly gratifying and successful; and that another year would place them in a position to pay handsome dividends. They have a large number of furnaces in operation at their works, Great St. Helens, Lancashire; and the process used is that of "Longmaid's patent." Several thousand tons of mundic have been used during the year; and some heavy contracts are now in course of completion, by which some mines will get rid of a large portion of what has hitherto been a heap of useless attle.

The transactions in foreign mines have been very limited; the only business which we are aware of has been confined to a few of the Altens, Australians, and Kinzigthals.

On Sunday, the 5th, the Royal West India Mail Steam-Packet Company's ship, *Clyde*, arrived at Southampton, having on board $35,134 on merchants' account, $216,288 in gold dust, 4324*l.* in British coin, $247,468 in silver bars—platina, value $2130, two boxes of pearls, value 1600*l.*, and general merchandise; the total value of specie, 554,500*l.* Also, on the same day, at Liverpool, from New York, the packet-ship *Cambridge*, having 30,000*l.* in specie on freight. On Wednesday, the 8th, at Liverpool, the new packet-ship, *Richard Allsop*, from New York, with 14,000*l.* in specie on freight.

Great interest is generally felt throughout France, to see what measures the new Government will propose to the Republican Legislative Assembly, when they meet in April next, as regards the alteration in the Customs duties on the importation of foreign iron, machinery, and coal, so long promised by the late and down-fallen Ministry of Louis Philippe. We understand that one of the grand projects will be a total revisal of the tariff, and a treaty of commerce with Great Britain, which will be highly beneficial to the industry and international intercourse between the two countries. The monopoly of the iron and forgemasters and coal mine proprietors, which has so long existed, to the great detriment of national enterprise and prosperity, and supported by the late Administration, under the pretext of protection, will find, in the present Government, a strong opponent. The next to prohibitory duties on the importation of British iron and coal, and the high prices exacted by the French iron-masters, have been the cause of the present depressed state of railway speculations in France, which have proved so ruinous to thousands. The whole of the leading manufacturers, shipbuilders, and railway contractors, hail with pleasure the change that has lately taken place in the Government, as they now have some hope that a more liberal system will be adopted, and the monopolists overthrown.

Hull, Tuesday.—The events of the past week have given a severe blow to confidence, and parties with capital at command hesitate to part with it, until some turn is given to affairs, one way or the other. North British stock has receded, in consequence of the dividend for the current half-year being at the rate of 5 per cent. per annum, instead of 6 per cent., which was a short time back confidently expected. There will be a surplus of about 9700*l.* as a kind of rest, or reserve.

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Carr's Hartley 15—Davison's West Hartley 15 6—Dipton Tanfield 11 6—Hasting's Hartley 15—Holywell Main 15—Nelson's West Hartley 15—New Tanfield 14—Original Tanfield 11 6—Pontop Windsor 13 6—South Pearseth 14—South Pontop 11 6—Tanfield Moor 14 9—Tanfield Moor Bute's 13 6—Wylam 14 6—West Wylam 14 6—West Hartley 15—Wall's End Bewicke and Co. 14 6—Framwell-gate 14 6—Gosforth 14 3—Heaton 14 3—Killingworth 14 9—Riddell's 14—Wharncliffe 14 3—Eden Main 16 6—Belmont 16 3—Braddyll's Hetton 16 6—Hetton 17 9—Lambton 17—Stewart's 18—Caradoc 16 6—Hudson's Hartlepool 15 to 15 6—High Thornley 13 6—Heugh Hall 14 9—Trimdon 15—Adelaide Tees 16—Seymour Tees 15—South Durham 14 6—Tees 17—Abercrave Stone Coal 25—Cowpen Hartley 15—Derwentwater Hartley 15—Sidney's Hartley 15.—Ships at market, 215; sold, 90.

WEDNESDAY.—Bates West Hartley 15—Carr's Hartley 15 6—Davison's West Hartley 15 6—Dean's Primrose 13 9—Dipton Tanfield 11 6—Hastings Hartley 15 6—Holywell Main 15—Nelson's West Hartley 15 6—North Percy Hartley 15—North Pontop 12—New Pelton Main 13 6—New Tanfield 13 6—Original Tanfield 11 6—South Peareth 14—Tanfield Moor 14 9—Townley 14 6—Wylam 14 6—West Wylam 14 6—Wall's End Bewicke and Co. 15 3—Killingworth 15 3—Riddle's 15—Wharncliffe 15—Eden Main 16 6—Braddyll's Hetton 17—Hetton 17 9—Jonassohn 15—Lambton 17—Shotton 16 9—Cassop 16 9—Caradoc 16 9—Hartlepool 17 9—Hudson's Hartlepool 15 9—High Thornley 14 3—Heugh Hall 15 6—Trimdon 15 6—Adelaide Tees 16 6—Brown's Deanery 15—Seymour Tees 15 6—Tees 17—West Cornforth 15—Sidney's Hartley 15 6.—Ships at market, 132.

FRIDAY.—Carr's Hartley 15 9—Hasting's Hartley 15 9—Holywell Main 15—North Percy Hartley 15 6—New Pelton Main 13 6—New Tanfield 13 6—Original Tanfield 11 6—Tanfield Moor 14 9—Townley 14 6—West Wylam 14 9—Wall's End Killingworth 15 6—Belmont 16 6—East Hetton 15 6—Hetton 17 9—Jonassohn 15—Lambton 17—Whitwell 15 9—Cassop 16 9—Hudson's Hartlepool 15 9—High Thornley 14 9—Seymour Tees 15 6—Abercrave Stone Coal 22 6—Sidney's Hartley 15 9—Caradoc 16 9.—Ships at market, 71; sold, 43; unsold, 28.

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending Mar. 4, was 16,328; amount of money, £68 0s. 8d.

Mr. T. Wright, C.E., of Leeds, is about proceeding to Barcelona, with a staff of men, engines, carriages, materials, &c., to conduct the first railway constructed in Spain.

An ingenious contrivance, for the transmission of money by railways, will be found described in the transactions of the Institution of Civil Engineers, in our 3d page.

LATEST CURRENT PRICES OF METALS.

LONDON, MARCH 10, 1848.

	£	s.	£	s.	d.		£	s.	£	s.	d.
IRON—Bar a...Wales...*ton*	0	0—	7	5	0	COPPER—Ord. bottoms ..	0	0—	0	0	11
...London ..	0	0—	8	5	0	YELLOW METAL SHEATHING	0	0—	0	0	6½
Nail rods „	0	0—	9	5	0	TIN—Com. blocks *g...cwt.*	0	0—	3	19	0
Hoop(Staf.) „	0	0—10	0	0		„ bars	0	0—	4	0	0
Sheet „ „	0	0—11	0	0		Refined	0	0—	4	2	0
Bars „ „	0	0—	9	10	0	Straits *h*	3	16—	3	19	0
Welsh cold-blast foundry pig ..	4	0—	4	10	0	Banca	0	0—	4	4	0
Scotch pig *b*, Clyde	2	5—	2	7	0	TIN-PLATES—Ch., IC *i, box*	1	7—	1	9	0
Rails, average	0	0—	7	15	0	„ IX ...	1	13—	1	15	0
Chairs	0	0—	5	5	0	Coke, IC	1	4 6	1	5	0
Russian, CCND *c*..	0	0—17	10	0	LEAD—Sheet *k* .....*ton*	0	0—18	10	0	
„ PSI	0	0—	——		Pig, refined	0	0—18	15	0	
„ Gourieff	0	0—	——		„ common	17	5—17	10	0	
„ Archangel	0	0—13	10	0	„ Spanish, in bd.	0	0—17	0	0	
Swedish *d*, on the spot	0	0—11	10	0	Red.....	0	0—19	10	0	
„ Steel, fagt.	0	0—16	0	0	Dry White.....	0	0—24	0	0	
„ „ kegs *e*	13	10—14	0	0	Shot (Patent).....	0	0—20	10	0	
COPPER—Tile *f*	0	0—87	10	0	SPELTER—(Cake) *l* on spot	0	0—16	15	0	
Tough cake	0	0—88	10	0	„ (Sheet) *m* export.*	0	0—26	0	0	
Best selected	0	0..91	10	0	„ for arrival	0	0—16	10	0	
Ordin. sheets, *lb*...	0	0—	0	0	10	QUICKSILVER *n* .....*lb.*	0	0—	0	4	6

a Discount 2½ per cent. *b* Net cash. *c* Discount 2½ per cent. *d* Ditto *e* In kegs ½ and ¼-inch. *f* Discount 3 per cent. *g* Ditto 2½ per cent. *h* Net cash in bond. *i* Discount 3 per cent. *k* Ditto 2½ per cent. *l* Net cash. *m* Discount 1½ per cent. *n* Discount 1½ per cent. * For home use it is 32*l.* per ton.

[FROM OUR CORRESPONDENTS.]

IRON.—Welsh and Staffordshire are as last reported in the *Mining Journal*. Scotch pigs have given way about 3s. per ton, and are dull of sale.

COPPER, TIN, and TIN-PLATES are as last quoted.

LEAD.—Sheets may be bought at 10s. per ton below last price, and pigs about 5s.

SPELTER has suffered considerable depression, in consequence of the interruption of supplies to France, and the unsettled state of the continental markets.

GLASGOW PIG-IRON TRADE, MARCH 9.—The unsettled state of affairs on the continent has produced considerable depression on our iron market—a number of orders for the continent have been countermanded in consequence. The uneasiness and excitement caused by a disturbance among the workpeople here, prevented business going on as usual this week. Mixed Nos. may be quoted at 45s. to 46s. cash, delivered free-op-board here.

NEW PATENTS.

F. Whishaw, Hampstead, Middlesex, civil engineer, for a certain manufacture of pipes of earthenware, pottery, and glass, and of certain applications and arrangements thereof.

W. Exall, Reading, Berkshire, for certain improvements in thrashing machines, and in steam-boilers, engines, and other apparatus for driving the same, which apparatus is applicable to driving other machinery—part of which improvements are a communication, and the remainder is his own invention.

J. Lockhead, Milton, Gravesend, Kent, gent., for certain improvements in ventilation.

T. C. Seegers, Knight of St. Gravenhage, Holland, but now of Leicester-square, Middlesex, physician, for improvements in the construction of railway carriages.

W. B. Johnson, Liverpool, engineer, for certain improvements which are applicable to locomotive, stationary, and marine steam-engines.

W. De la Rue, Bunhill-row, Middlesex, manufacturer, for improvements in machinery used in the manufacture of cardboard and pasteboard. (Being a communication.)

J. Houston, Stepney, Middlesex, surgeon, for improvements in obtaining motive power by the aid of atmospheric air, and in obtaining combustion.

G. Boyce, Fletland, Lincoln, miller, for improvements in machinery or apparatus for depositing, cleansing, and grinding corn and seed.

G. Lloyd, Stepney, Middlesex, iron founder, for certain improvements in furnaces and blowing machines, and improvements in engines and machinery for driving the same, which improvements are applicable to other purposes where motive power is required.

J. McConochie, Liverpool, C.E., and L. J. Claude, Bootle, Lancaster, C.E., for certain improvements in locomotive engines.

A. Alliott, Lenton Works, Nottingham, bleacher, for improvements in apparatus used in the working of steam-boilers, also in apparatus used in cleaning flues.

J. H. Porter, Blackheath, Kent, for improvements in iron girders, beams, trusses, and supports, and in rendering the floors of buildings fire-proof by the use of iron.

J. Maudslay, of the firm of Maudslay, Sons, and Field, engineers, for certain improvements in obtaining and applying motive power, and in the machinery and engines employed therein.—*Mechanics' Magazine.*

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	*Traffic Returns.* 1848	1847
Arbroath and Forfar	16	£179,939	25½	4p.c.	£	£221
Birkenhead, Lancashire, & Chesh.	15	706,793	38½	—	669	638
Caledonian	139	3,594,470	29⅝	—	2654	—
Dublin and Drogheda	35	733,655	52	3½	638	683
Dublin and Kingstown	7½	473,282	—	7	753	768
Dundee, Perth, & Aberdeen Junc.	47½	285,745	30	6	857	281
East Anglian (Lynn to Ely)	55½	1,062,742	8⅝	—	541	—
East Lancashire	24	1,733,915	20	—	979	564
Eastern Counties	221½	7,698,370	13⅝	5	10725	8655
Eastern Union	50	979,926	80	—	1022	873
Edinburgh and Glasgow	53	2,375,745	35	6	3021	3225
Edinburgh and Northern	29	953,207	18	—	1042	—
Glasgow, Paisley, and Ayr	64½	1,898,547	85⅝	7	2053	2058
Glasgow, Paisley, & Greenock	23	838,964	16	3	913	969
Gt. Southern & Western, Ireland	110½	1,876,326	19½	—	1835	1080
Great Western	281½	10,970,636	95	7	16802	15696
Kendal and Windermere	10½	169,888	23	—	107	—
Lancaster and Carlisle	70	1,395,193	49	4	1512	—
Lancashire and Yorkshire	124½	6,807,314	88⅛	7	8787	7850
London and North Western	428	21,513,354	134	8	36218	35321
London and Blackwall	4	1,146,289	5	¼	659	728
London, Brighton, & South Coast	152½	6,087,822	30⅝	4	6312	5232
London and South-Western	189	6,264,164	49	8	6911	5385
Londonderry and Enniskillen	14½	160,013	16	—	129	—
Manchester, Sheffield, & Lincolnsh.	46	2,336,624	80	5	1982	1759
Maryport and Carlisle	28	424,417	39	3	522	535
Midland Company	402½	8,658,604	104	7	19019	16576
Midland Great Western (Irish)	36½	583,776	10⅛	—	899	—
Newcastle and Carlisle	66½	1,184,080	101⅛	6	1948	1949
Norfolk	81½	1,375,633	65	6	1685	1516
North British	78	2,514,150	23	5	1863	1378
Shrewsbury and Chester	17	591,158	17	—	484	321
South Devon	29	1,339,860	20	—	697	427
South-Eastern	165½	6,398,218	27	6	6550	5700
Taff Vale	38	785,607	—	5½	1703	1403
Ulster	25	646,211	52	6	785	773
Whitehaven Junction	12	147,095	—	6	168	—
York, Newcastle, & Berwick	236½	3,685,102	30	9	9591	8199
York and North Midland	230½	3,196,869	67	10	5951	5372

FOREIGN RAILWAYS.

Amiens and Boulogne	68½	573,338	8½	4	799	—
Antwerp to Ghent (monthly)	31	——	——	—	1100	—
Belgian .....ditto	—	——	——	—	—	—
Dutch Rhenish	57½	——	1	—	619	532
Northern of France	211	2,000,000	4½	4	—	8670
Orleans to Bourges (Central)	107½	——	——	—	2404	—
Orleans to Tours	72	600,000	32⅛	4	2820	2358
Paris and Orleans	82	2,011,720	47⅛	12½	7581	6606
Paris and Rouen	85	2,082,916	24	11⅛	7208	5805
Rouen and Havre	59½	——	10⅛	4	2789	—
Strasburgh and Basle (monthly)	88	——	6	1½	5237	6169
West Flanders ..... (ditto)	—	——	1½	—	964	—

Total earnings for last week, £147,223, being an increase of £10,663 over last year.

THE NEW ANNULAR BRACES.—The numerous purposes to which caoutchoue has been applied in the arts, are daily being increased, and it may be considered, now an article of universal adoption, from the most important engineering purposes to those of the lighter articles of dress and domestic use. It has long been applied to braces as a means of rendering them elastic; and Messrs. Margetson and Welsh, of Cheapside, have lately introduced it in a novel manner to this article of dress. It has long been a desideratum to devise some means by which the brace should be prevented slipping off the shoulders, and also to allow them to give under the various motions of the body, and thus avoid the wear to which the linen is at present liable. In the improved brace a ring of vulcanised India-rubber forms the centre of the back, on which the four ends of the braces are fastened, and the ring freely revolves within the loops. By this simple contrivance the wearer is relieved of all unpleasant tension, the elasticity of the ring enables it to give way to every motion of the frame, the webbed parts of the braces remain firm on the shoulders; and, while they are productive of the greatest ease, the shoulders of the shirt are prevented from being chafed and worn. In every kind of exercise, particularly such as hunting, shooting, cricketting, &c., these braces will be found productive of the greatest ease and comfort.

OPENING OF A NEW COAL-PIT.—On Tuesday last, a procession of 12 carts, newly painted, their drivers dressed in new blue smock-frocks and white hats, and loaded with coals (some very large lumps being conspicuously placed on the outside), which were surmounted by blue flags, union-jacks, &c., passed down Market-street and the principal streets of this city—the procession being brought up by six colliers or carters, wearing blue slops, round white hats trimmed with blue ribbons, &c. A board, displayed on the first cart, intimated that the procession was in celebration of the opening, by Messrs. William Jones and Co., of the New Oldham Black Mine, near the Oldham Railway station, and that the coals in the carts were the first got. The procession was, of course, accompanied by a number of children and idlers, who cheered it vociferously. —*Manchester Guardian.*

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwessin	7 ..	—
512	Albert Consols	1 ..	2½
1024	Alfred Consols	4½..	14
235	Andrew and Nangilles	28½..	11½
1000	Antimony and Silver-Lead Mining & Smelting	5 ..	5
1624	Balleswidden	9 ..	18
128	Balnoon Consols	25 ..	25
10000	Banwen Iron Co.	2 ..	—
1000	Barristown	4½..	5
4000	Bedford	2½..	3
128	Besore Lead Mine	14 ..	10
515	Birch Tor Tin Mine	24½..	—
8000	Blaenavon	50 ..	23
100	Botallack	175 ..	80
120	Brewer	5 ..	7
10000	British Iron, New, regis.	10 ..	13
—	Ditto ditto, scrip	10 ..	12
128	Budnick Consols	52½..	30
128	Burthy	20 ..	21
100	Bwich Cwmerfin	20 ..	—
128	Callestock	17 ..	30
1000	Callington	19 ..	32
20000	Cameron's Steam Coal	4 ..	5½-¾
256	Caradon Copper Mine	9½..	2
256	Caradon Mines	22½..	17
256	Caradon United	24 ..	5
256	Caradon Wh. Hooper	21 ..	15
1000	Carn Brea	15 ..	105
3000	Carthew Consols	1½..	6
2048	Cascade	1 ..	2
112	Charlestewn	320 ..	30
166	Cleveland	9 ..	5
512	Coatlithe Hill	½..	2
1900	Combmartin	7½..	3
500	Combiawn	5½..	6
128	Comfort	45 ..	90
256	Condurrow	20 ..	31-2
2560	Cook's Kitchen	14 ..	2
2048	Coombe Tin Mine	4½..	4-5
1000	Coombe Valley Quarry	2½..	3½
1000	Copper Bottom	1 ..	1
1024	Cosheen	4½..	20
240	Craddock Moor	16½..	15
128	Creeg Braws	120 ..	100
500	Cubert Mine	12½..	15
1000	Cwm Erfin	1½..	2½-3
2048	Dartmoor Consols	3 ..	2
300	D. Prior & Buckfastleigh	14 ..	26
7500	Demelza Mines	2 ..	—
7100	Derwent	8½..	5
1024	Devon & Courtenay Con.	7½..	2-3
1024	Devon Great Consols	1 ..	210-15
1000	Dhurode	2 ..	5
186	Dolcoath	30 ..	50
2560	Drake Walls	4 ..	4
10000	Durham County Coal	45 ..	9
3000	Dyfngwm	10 ..	12½
256	East Alvenney	10 ..	25
112	East Caradon	47 ..	47
2048	East Crowndale	5½..	4½
512	East Combe Silver-Lead	6½..	6½
128	East Pool	5 ..	20
100	East Relistian	22 ..	40
—	East Wheal Albert	1 ..	3
94	East Wheal Crofty	125 ..	280
1024	East Wheal Fortune	2 ..	3
1024	East Wheal Friendship	3 ..	3
128	East Wheal Rose	50 ..	1150
2048	East Wh. Rough Tor	½ ..	2
—	East of Scotland Iron Co.	2½..	1½
123	East Wheal Seton	14 ..	15
256	Elborough	1½..	2
256	Exmoor Wh. Eliza	3½..	6
512	Fowey Consols	40 ..	45
6400	Gadair	2 ..	2
20000	Galvanised Iron Co.	10 ..	9½
4000	Gen. Mining Co. for Irel.	1½..	2½
2048	Georgia Tin Mines	1⅝..	1⅝
256	Gonamena	32½..	30
128	Goonvrea	4 ..	1½
244½	Grambler & St. Aubyn	— ..	10
100	Great Consols	1000..	400
256	Great Callestick Moors	22..	25
3560	Great Michell Consols	1½..	3½
256	Great Resugga Moor	11 ..	12
512	Gt. Wh. Rough Tor Con.	15½..	18
100	Grogwinion	5 ..	—
256	Gwinear Consols	7 ..	10
6000	Heigaston Down Con.	½..	2½
256	Herodscombe	5½..	4½
256	Herodsfoot	18 ..	19
10000	Hibernian	12½..	1⅝
239	Hobb's Hill	6 ..	3
1000	Holmbush	19 ..	11
827	Kirkcudbrightshire	5½..	3
500	Lady Elizabeth	5 ..	5
2048	Lamherooe Wh. Maria	11 ..	4
128	Leliant Consols	90 ..	60
160	Levant	— ..	90
1000	Lewis	15 ..	6½
1000	Llwyn Malees	5 ..	—
8600	Llynvi Iron	50 ..	50
256	Lostwithiel Consols	15 ..	15
6000	Marke Valley	10 ..	4
5000	Mendip Hills	2½..	1½
8000	Merionethshire Slate & Slate Slab Co.	1½..	2
20000	Mining Co. of Ireland	7 ..	7
256	New East Crowndale	3½..	3⅛
128	North Fowey Consols	37 ..	34
100	North Pool	45 ..	475
70	North Roskear	10½..	310
256	North Wh. Abraham	1 ..	1
262	North Wh. Leisure	1½..	2
128	North Wh. Providence	2½..	3
15000	Northern Coal Co.	23 ..	2
128	Par Consols	— ..	1000
4000	Pennant	1½..	2½
100	Penrhiw	30 ..	65
1280	Perran St. George Un.	13 ..	20
128	Perran Wh. Virgin	9½..	15
512	Plymouth Wh. Yeoland	6½..	21
256	Polsaith Consols	4½..	7
112	Providence Mines	35 ..	45
10000	Rhymney Iron	50 ..	20
10000	Ditto New	7 ..	6⅞
2500	Rhoswhiddol Mine	— ..	10
256	Rose Consols	10 ..	2
1000	Rosewall Hill	1 ..	5
256	Rosewarne Mines	— ..	12
—	Shotts Iron Company	50 ..	55

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
2500	Silver Valley	5½..	—
1100	South Dolcoath	3 ..	2½
128	South Caradon	10 ..	450
256	South. Friendsh. Wh. Ann	16 ..	25
200	South Harvannah	10 ..	25
256	South Tolgus	7½ ..	50
256	South Trelawney	20 ..	8½
128	South Yeoland	16½..	20
128	South Wheal Basset	110 ..	90
256	South Wh. Betsey	2½..	5
124	South Wh. Francis	160 ..	210
256	South Wh. Hope	— ..	5
1000	South Wh. Maria	2½..	2
256	South Wheal Rose	11½..	1
256	South Wh. Sophia	4 ..	4½
10000	Southern & Western, Irish	2 ..	4
280	Spearne Moor	30 ..	40
256	St. Austell Consols	9 ..	6
94	St. Ives Consols	— ..	320
128	St. Michael Penkivel	5 ..	10½
999	St. Minver Consols	1 ..	6
1000	Stray Park	43 ..	18
9600	Tamar Consols	3 ..	4½
1024	Tavy Consols	4 ..	10-12-½
6000	Tincroft	7 ..	6
1000	Tin Vale	2 ..	11
128	Tokenbury	147½..	10
256	Treluane	2 ..	25
5000	Treleigh Consols	6 ..	3
2000	Trenance	2 ..	50
96	Tresavean	10 ..	210
120	Trethellan	5 ..	16
120	Treviskey and Darrier	130 ..	136
288	Trevean	1½..	25
128	Trewellard	12 ..	26½
100	United Mines	300 ..	350
256	Wellington Mines	15 ..	30
128	West Basset	45 ..	80
256	West Caradon	20 ..	160
128	West Cargoll	2 ..	12
512	West Fowey Consols	40 ..	15
256	West Providence	9 ..	25
200	West Seton	40 ..	150
—	West of Scotland Iron Co.	210..	210
120	West Trethellan	5 ..	30
256	West United Hills	— ..	5-8
256	West Wh. Friendship	9 ..	12
3845	West Wheal Jewel	11 ..	1½
2560	West Wh. Maria	3 ..	1
256	West Wheal Shepherd	5 ..	2½
256	West Wheal Tolgus	21½..	5
256	West Wheal Treasury	19 ..	10
5200	Wicklow Copper	5 ..	12½-⅝
184	Wheal Adams	51 ..	10
1000	Wheal Agar	— ..	10
256	Wheal Albert	10 ..	8
128	Wheal Acland	13 ..	2
256	Wheal Allen	2 ..	5
240	Wheal Anderton	21 ..	25
128	Wheal Ann	— ..	50½
512	Wheal Ann, Bridford	1 ..	2
512	Wheal Anna Maria	3½..	5
1024	Wheal Ash	4½..	8
120	Wheal Bal	5½..	20
2560	Wheal Barbara	1½..	4-5
256	Wheal Benny	10½..	6
256	Wheal Blencowe	21 ..	6
256	Wheal Bucketts	20 ..	5
256	Wheal Calstock	8 ..	8½
136	Wheal Clifford	190 ..	190
1024	Wheal Coad	½..	5
128	Wheal Courteany	— ..	20
6000	Wheal Curtis	2½..	2½
256	Wheal Dyke	12 ..	13
256	Wheal Fortescue	6½..	5
512	Wheal Fortune Consols	3½..	6½
2048	Wheal Frederick	2 ..	2
388	Wheal Franco	27 ..	35-38
128	Wheal Harriet	45..	50
256	Wheal Jane	21 ..	15
256	Wheal Louisa	8½ .	8
112	Wheal Margaret	79 ..	350
512	Wheal Mary Ann	5 ..	20
256	Wheal Mary Consols	40 ..	26
210	Wheal Prospect	4 ..	7
120	Wheal Reeth	41 ..	150
128	Wheal Rose	60 ..	15
2048	Wheal Samson	½ ..	20
99	Wheal Seton	214 ..	1000
256	Wheal Sisters	30½..	17
256	Wheal Sophia	5½..	10
128	Wheal Spearne	10 ..	75
128	Wheal St. Ann	9 ..	15
260	Wheal Trelawney	7½..	95
256	Wh. Tremaine (St. Ervan)	4½..	20
256	Wheal Tremayne	35 ..	25
128	Wheal Trew	20 ..	21
256	Wheal Trevenna	3 ..	4
92	Wheal Tryphena	140 ..	265
121	Wheal Venland	29½..	30
256	Wheal Vlow (Perranz.)	⅝..	⅝
184	Wheal Vyvyan	— ..	60
256	Wheal Williams	6 ..	14

FOREIGN MINES.

5000	Alten Mining Company	14½..	3
15000	Asturian Mining Co.	12 ..	4
20000	Australian	2½..	3½-⅝
10000	Anglo-Mexican Co.	100 ..	2
12374	Ditto Subscription	25 ..	2½
6000	Barossa Range	⅝ ..	2
3000	Bolanos	150 ..	3⅝
2000	Ditto Scrip	15 ..	3⅝
12000	Brazilian Imperial	23 ..	5½
10000	Cobre Copper Co.	40 ..	18
8500	Colombian Co. regis.	55 ..	1
5000	Ditto Scrip	5½ ..	
5000	Copiapo Mining Co.	14 ..	2½
10000	General Mining Ass'n.	20 .	13⅝
5000	Kinzigthal Mining Ass.	2 ..	3⅝
20051	Mexican Company	59 ..	—
2000	Mexican & South Amer.	7 ..	1⅝
5000	Mocaubas & Cocaes	30 ..	4-5
29320	Ril. del Monte, regis. / Ditto unregistered	28½..	1⅝-2
	Ditto Red Debentures	— ..	10
	Ditto Black ditto	— ..	6
	Ditto Loan Notes	150 ..	60
7005	Royal Santiago	10 ..	6
2000	Pachuca Mines	4 ..	4½
11000	St. John del Rey	15 ..	6½-⅝
43174	United Mexican	Av. 28½..	1½-2½

SOUTH AUSTRALIAN SHARE MARKET—OCT. 8.

Company.	*No. of Shares.*	*Capital.*	*Paid-up.*	*Present Price*
Burra Burra	2464	£12,320	£12,320	£103 0
Princess Royal	400	20,000	16,000	67 0
Adelaide	2000	10,000	10,000	4 0
North Kapunda	436	21,800	21,800	20 0
Royal Mining Company	10000	100,000	10s. p. sh.	0 15
Wakefield	500	1,000	£1,000	1 5
Greenock Creek	300	1,000	1,000	6 0
Montacute	100	5,500	5,500	55 0

*** *We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

MISCELLANEOUS COMPANIES.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
10,000	Assam Tea Company	£20	—	£ 3
1,080	Auction Mart	—	£ ⅛	28
10,000	Australian Agricultural	30	1	22
10,000	Australian Trust	35	—	30
8,000	British Alkali	25	4	16⅝
10,000	British American Land	35½	—	14
8,600	British Rock and Patent Salt	35	18	11
9,915	Canada	32½	6	31
—	City Bonds (Navigation)	—	3½	89
1,800	Corn Exchange	37½	1½	26½
5,000	Droitwich Patent Salt	25	⅝*	11
2,700	Equitable Reversionary	95	4½	90
—	General Reversionary Interest	100	5	100 105
0,000	General Steam Navigation	14	1⅝*	24½
—	Hudson's Bay Stock	—	10	230 240
2,100	Hungerford Market	100	⅝	45
1,500	London Commercial Sale Rooms	—	1½	31 32
8,000	London Reversionary	22	—	24⅝
300	Margate Pier	—	10	196
10,000	Mexican and South American	7	—	3½ 4
20,000	New Brunswick	75	—	—
11,600	Peninsular and Oriental Steam	50	7	57
6,600	Ditto	40	—	—
5,387	Reversionary Interest Society	100	4½*	95
—	Royal Mail Steam	—	5½	43 45

* Those marked with an asterisk (*) are dividend per share.

DRAINAGE OF THE METROPOLIS.—The following is the title of a bill about to be introduced into Parliament on the part of the Great London Drainage (late London Sewage) Company, by Mr. H. Drummond, and Mr. B. Baldwin—VIZ.: "A Bill to afford means for effectually Draining the Metropolis; to preserve the Thames from the impurities at present passing into it, by diverting them into subterraneous main channel sewers, and to collect all the produce of the sewers for application to agricultural purposes." The preamble of the bill is to the following effect:—"Whereas it is expedient that powers should be granted for more effectually draining and cleansing the city of London, and the parts adjacent thereto, which lie within the limits hereinafter mentioned, and that provision should be made for interrupting and collecting the sewage water, sullinge, soil, and other refuse matters now discharged within the said limits, through the various sewers, drains, and culverts, into the River Thames, and for adapting and applying the same to the purposes of agriculture, whereby the health of the inhabitants of the metropolis will be greatly promoted, and a valuable manure produced." There are 43 clauses to the bill. Under the authority of this Act, two interrupting sewers are to be made, one commencing at Charing-cross, and continuing through the heart of the City, and eastwards to the Essex Marshes, where it is proposed that certain receptacles, depositaries, and other works, shall be made and constructed for the reception and disposal of the said sewage; the other on the south side of the river, from Battersea to some marsh land bordering on the River Thames, in the parish of St. Alphage, Greenwich, where similar receptacles, &c., are to be formed. To protect the public from the inconvenience which would arise if the interrupting sewers were to be constructed by means of cuttings, it is proposed to construct them by means of subterraneous boring, and not by open cutting. Permission is however given for using such temporary or permanent shafts as may be necessary to obtain access to the interrupting sewers, for the purpose of making, constructing, or repairing them, and for depositing therein any sewage water, sullinge, soil, or other refuse matters.

JOINT-STOCK BANKS.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
22,500	Australasia	£40	£3	£20
20,000	British North American	50	6	43
20,000	Colonial	25	5	9
—	Commercial of London	20	6	20 20½
4,000	Ionian State	25	6	24½ 25
60,000	London Joint-Stock	10	6	15
30,000	London and Westminster	20	6	23½
10,000	National Provincial of England	35	5	36
20,000	National of Ireland	22½	5	17
20,000	Provincial of Ireland	25	8	40
4,000	Ditto New	10	8	15
20,000	Union of Australia	25	6	23½
10,000	Ditto New	2½	6	2½ 2¾
60,000	Union of London	10	5	10 10½

GAS-LIGHT AND COKE COMPANIES.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
5,000	British (London)	£18	£1*	£17
5,000	Ditto (country)	19	1⅝*	22½
1,000	City of London	100	10	265
1,000	Ditto New	100	10	265
4,000	Equitable	50	5	38½
10,000	European	20	1½	18
12,000	Gas-Light and Coke Chartered Co.	50	6	56 56½
6,000	Ditto New	10	6*	11 11½
9,000	General United Gas-Light Company	50	2	16
10,000	Imperial	50	6	74
46,400*l.*	Ditto Debentures	100	4	100
8,000	Imperial Continental	39½	4½*	54 56
7,000	Ditto New	28	4½*	61
54,500*l.*	Ditto Debentures	100	5	100 102
2,000	Independent	40	6	64
3,000	London	50	6	10
3,000	Ditto	50	5	35
9,000	Phœnix, or South London	43	5	33
1,000	Ratcliff	80	5	80
4,000	South Metropolitan	25	6	30 32

LEAD ORES

TICKETINGS FOR ABOUT 80 TONS LAXEY LEAD ORE.

Douglas, Isle of Man, March 4, 1848.

Bidders.	*Price per Ton.*
Walker, Parker, and Co. (purchasers)	£19 7 0
Benj. Somers	18 0 0
Tamar Smelting Company	17 11 6
Newton, Keates, and Co.	16 5 6
Sims, Willyams, and Co.	15 15 0

TICKETINGS FOR ABOUT 45 TONS OF NEWTONARDS LEAD ORES.

Douglas, Isle of Man, March 8, 1848.

Buyers.	*Price per Ton.*
Walker, Parker, and Co.—Chester	£9 13 6
Tamar Smelting Company—Tavistock	9 0 6
Benj. Somers—Bristol	8 10 0
Sims, Willyams, Nevill, and Co

NOTICES TO CORRESPONDENTS.

It will at all times save much trouble, and frequently considerable delay, if communications are simply directed—

To THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

Also, to avoid trouble, POST-OFFICE ORDERS should always be made payable to WILLIAM SALMON MAWELL, as acting for the proprietors.

*** We should feel obliged to all pursers, captains, or adventurers, to forward particulars of meetings, &c., of the mines with which they may be connected, on the earliest opportunity, that they may be published in the Journal with as little delay as possible.

Glossary of Mining Terms.

We are preparing for publication, as a neat pocket volume, our Glossary of English and Foreign Mining and Smelting Terms. The new edition will comprise several corrections in the Cornish Terms; also, the additions with which we have since been favoured by correspondents—comprising those of South Staffordshire and Newcastle.

DARTMOOR CONSOLS.—We shall very readily direct attention to the matter referred to by "A Poor Miner," on receiving an authenticated statement.

TAVY CONSOLS.—We have again this week received several letters, referring to this mine: in some the sett is represented as remarkable for richness—while, in others, it is declared to be utterly worthless: prices of shares have also been forwarded us, varying from 7*l.* to 15*l.* The notice among our Notabilia has been received from an accredited source, but the committee should furnish an authenticated report, to set these conflicting statements at rest.

LLANHALLEN MINE.—We had in type a report on this mine, with an abstract of the accounts, as submitted to the adventurers; but, it appearing some error exists, we have thought it prudent to delay its insertion until our next, and shall, in the meantime, make further inquiry.

"A Subscriber" (Gwennap) should refer to our Glossary of Mining Terms—the term *Gin* will be found under the head "Derbyshire;" and, in an addition, which we hope to publish in our next Number, under that of "South Staffordshire."

The Nister Dale and Galvanised Iron Companies would not permit our reporter to be present at their meetings—we are, therefore, unable to give a notice of their proceedings.

MENDIP HILLS MINE.—The letter addressed to the shareholders, by "F.," shall appear next week—it was received too late for our present Journal.

We are compelled to postpone the paper on "A Universal Deluge," by Dr. Murray; also some Literary Notices, and other matters.

Received.—An Old Subscriber—M. (Leeds)—AJAX—G. W. (Redruth).

We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses; not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, MARCH 11, 1848.

The convulsion, which has just shaken the institutions of a neighbouring nation to their centre, and hurled a crown from the head of one of the most powerful and crafty sovereigns of Christendom, continues, by its undulations, to disturb the commercial progress of half the civilised world. The exchanges of Amsterdam, Hamburgh, Paris, and London, cannot steady themselves. The shock has been propagated with such force, that it is still careering along the wires; and throughout the mercantile cities of Europe the indices of commercial security are fluttering, as beneath some preternatural disturbance; than this, nothing can be more detrimental to the general interests of business. Commerce is the eldest boon of peace, and can neither reach its maturity, nor attain its strength, while encircled with a sense of fluctuation, or a fear of conflict; in point of fact, the changes and apprehensions to which we refer have already checked the improvements which were in progress, and, in some sense, given us the work of the two early months of the year to do over again. They have appointed us to the task of SISYPHUS—the stone which, with great toil and travail, we had rolled up the hill, has been rolled back upon us; the public funds have gone down, and the commercial horizon is overcast with many a cloud. As we have said before, we believe our great remedy, under the circumstances, is the renewed dedication of our strength, as a working people, to the ardent prosecution of our duties; there must be no thought, but how we can most efficiently repair or restore whatever, in the course of events, has been injured, or lost. If we faithfully discharge our obligations in this respect, things will gradually and certainly return to their desired form, and to their healthy activity. We have great pleasure in announcing the probable continuance of the Great Dowlais Iron-Works, and that there is reason to hope, that by the moderation of all parties, that important undertaking will be continued in all its fulness and activity. We believe we may also confidently say, that some very extensive iron-works, in Derbyshire, will shortly be resumed;—and our opinion is, that the absence of that great necessity for money, to feed our external commerce, which now, to a great extent, prevails, will necessarily attract the hoarded capital of the kingdom into those channels of domestic occupation—to mining and railways, for instance—from which the most beneficial and happy consequences may be anticipated.

In these dull times, when business languishes, and speculation is almost at a stand, there is nothing more necessary than *economy*. It applies to every pursuit; but to no one pursuit more than to mining. A reckless expenditure has, too often, in the best of times, been the means of stopping good mines, and of disgusting the adventurers. It is the fear of extravagance, as much as of mismanagement, that deters many from mining—for what can the public think, when they see directors and agents pocketing their hundreds a year, whilst nothing but calls are made upon the pockets of the shareholders? We will venture to affirm that, during the late troubles and disasters in the commercial world, although the "calls" on mines were unusually frequent and heavy, they were, with few exceptions, met in a prompt and praiseworthy manner, and always without murmur, when it was known the mines were managed *economically*, and that money was not wasted in paying exorbitant salaries to officials. We have been led into these few remarks from a letter, in our last week's Journal, addressed to the shareholders in the Mendip Hills Mining Company. From that communication, it would appear, the London management costs 440*l.* a year; a purser on the spot, 60*l.*; and the agent (we presume) does not get less than 8*l.* per month—say, in round numbers, 100*l.* per year—total, 600*l.* a year for salaries alone. This seems almost incredible, but we are informed that it is about correct; and that the dissatisfaction among the shareholders is showing itself in an unmistakeable manner. We do hope, therefore, the directors, at the meeting about to be held, on the 24th inst., will come forward and meet the wishes of the proprietary, and at once reduce these fearful expenses. If not, the shareholders have their remedy in their own hands; and they will have themselves alone to blame if they remain quiescent. For 100*l.* a year there are many well-qualified persons, who would undertake the management, and act efficiently.

A few words more—a practice has arisen of late—more especially at railway meetings—of chairmen and directors making any attempt of the shareholders to examine thoroughly into their affairs, a personal matter. Thus, inquiry is too often stifled; and we can scarcely conceive anything more pernicious to the interests of public companies. Directors are responsible to the proprietary, and we consider the holder of a single share to have an equal right to be heard as the holder of a thousand. At only one mine meeting that we have attended have we heard this plan practised, and we hope, for the credit of mining, never to hear it again, though the managers of Silver Valley and of Mendip Hills are somewhat nearly related. If we are rightly informed, the smelting-works at Mendip Hills hold out fair prospects of amply remunerating the shareholders for their outlay. The furnaces are at work, and vast beds of slag laid open, sufficient, as we are told, to yield 50 tons of lead per month. The mining operations, however, are unproductive, and entail an expense upon the company, which is not warranted either by present appearances, or by the chances of future improvement. Why, then, continue them? This is a question we shall leave to the notice of the adventurers at the meeting about to take place, before continuing the remarks we had intended.

Considering our insular position and our mercantile greatness, there is, perhaps, nothing of higher importance than that zone of ports with which this beautiful island is girdled—their utility branches out into several directions—as points of defence; and, therefore, points of strength wherever they occur: as havens of shelter, and as places to receive the merchandise of both hemispheres, and as depositories of arms, where we lay up our naval strength for all warlike emergencies. With these views of their value and materiality, we should, for our own parts, be greatly gratified at seeing a commission issue, whose sole work should be the improvement and multiplication of the harbours of the United Kingdom. On the southern coast of Cornwall there are two ports, which, on the foundation of their great merits alone, are working their way to a high maritime reputation—we speak of the ports of Falmouth and Fowey. The first of these, indeed, is already well known to every seaman of any mark, whether in the QUEEN'S ships, or the vast merchant navy of the kingdom, as an anchorage and haven of first-rate capacity and importance. The second is not so well known, nor qualified to take its place in the same class of harbours, but, nevertheless, well situated; and, by the exertion of the resident influential gentry of the place, directed to proper and adequate means, improving in its depth of water, its good anchorage, and its safe shelter. That ports situated at these salient, projecting parts of the coast should have their natural elements trained up into additional strength and utility is of all the more consequence, considering their distance from the central energies of the empire, and their consequent exposure to assaults from without, as well as to supineness from within. They are the Channel ports of an opulent mining district; and though, as we think, other and more efficient causes are at work, which are likely to load their quays with merchandise, and fill their waters with busy shipping, yet the circumstance of their abutting upon the great mining theatre of Cornwall, will not eventually be the least ingredient in the filling cup of their prosperity.

PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

The Bourse was reopened on Tuesday, after having been closed since the closing on the 23d Feb., the day preceding the revolution. On the 23d Feb., the 3 per Cents. closed at 73 fr. 50 c.; and the 5 per Cents., at 116 fr. 15 c. On Tuesday, the former closed at 56 fr. 50 c.; the latter, at 89 fr. Yesterday, the 3 per Cents. closed at 47 fr.; the 5 per Cents., at 75 fr. Here, then, at one fell swoop, is a decline of 26 fr. 50 c in the 3 per Cents., and 41 fr. 15 c. in the 5 per Cents. In railway shares, the decline has been enormous—for example: the Northern, which closed on the 23d Feb., at 540 fr., closed last evening at 347 fr. 50 c.; the Rouen, which were at 858 fr. 75 c. on the 23d Feb., closed last evening at 485 fr.; the Havre were at 417 fr. 50 c. on the 23d, and closed last evening at 200 fr. In the shares of mines, iron-works, and other enterprises, no decline at all can be specified, for no transactions have taken place; but it may be assumed, at a very moderate estimate, the market value of such property is, at least, one-third less than it was on the afternoon of the 23d Feb.

In the face of this decline, I think you will be of opinion, that I did well in my last, in respectfully recommending your readers not to think of withdrawing the capital they have placed in this country. Those who have sold off must have cruelly suffered. Perhaps those who still hold *may* suffer as severely, and even more so; but, at all events, they have the chances of the future in their favour, and those chances really ought not to be disregarded. The French may succeed in establishing a Republican Government without any convulsion, any disturbance of order; that Government may adopt a mild and prudent policy, and thereby succeed in maintaining order at home, and preventing war abroad. If this should be the case, commercial activity and prosperity would immediately return, and the first consequence thereof would be a rapid advance in the price of the *rentes*, shares in railways, mines, iron-works, &c.

But *will* the French succeed in establishing such a Government, and in restoring public confidence? *That* is the question. To find the answer to it, however, is beyond the power of man. For my part, I can only repeat what was said in my last letter—viz.: that *present* appearances are very promising; and that, from *present* appearances, the chances are, that everything will turn out well. At the same time, let it not be forgotten that there are many and great difficulties to be contended against—many great dangers to be avoided or battled through.

Even if the worst should come to the worst—that is, if we have domestic anarchy, or foreign war—I really think that the interests, of which you are the organ, would suffer *less* than any other. In either case, they would undoubtedly suffer—probably, dreadfully; but still I repeat, on the whole, they would not be so extensively affected as others. I derive this conviction from a glance at the past. In 1789, for example, the production of native coal was 2,400,000 met. quin., and the importation of foreign 2,400,000 (the figures are exactly the same); in 1802, the native production was 8,441,800 met. quin., the importation 1,160,000 met. quin. The period comprised between those two intervals was one of the most frightful anarchy, and one in which, for a long time, the nation was at war. Yet remark the enormous increase in the production, and the not very great falling off in the importation. Take another period—from 1811 to 1815 France was at war, yet in 1811 she produced 7,736,941 met. quin. of coal; 1812, 8,855,221 met. quin.; 1813, 7,717,791 met. quin.; 1814, 7, 883,716 met. quin.; 1815, 8,815,872 met. quin.—and she imported in 1811, 1,200,000 met. quintals; 1812, 1,240,000 met. quintals; 1813, 1,170,000 met. quin.; 1814, 1,653,457 met. quin.; 1815, 2,493,948 met. quin. Of these imports *none* came from England in 1811, 1812, or 1813, owing to the vigorous blockade which was placed on all our products; but in 1814 and 1815 although we were at war with France in those years, 113,923 and 224,324 met quin. of English coal were imported. I think these figures, which are taken from official documents, are calculated to bear out the position just laid down. They prove that neither domestic anarchy, nor civil war, prevented the gradual increase in the production and importation, and, by consequence, consumption of coal—and, if that were the case so many years ago, why should it not be the case again? Besides, then we were at war with France, whereas *now* there is not the slightest probability that, come what may, *we* shall go to war with her, for we are all well disposed towards the French, and I can assure you that they entertain the most friendly feelings towards us.

I hope, then, that your readers will look calmly on the most momentous events which are passing in this country; by doing so, they will, I think, become convinced that, as regards *their* interests, the recent revolution will, in the long run, not be so terrible as they may have anticipated. It is not improbable, indeed, that it may lead to the complete abolition, or, at all events, a very extensive modification, of those import duties which cripple English exports.

Perhaps, some of your readers who have property at stake in France, may see, with some little alarm, certain of the measures taken by the Government—such as the reduction of the hours of labour of the working classes, a disposition to meddle with the arrangements between them and their employers, and a plain intimation that they are entitled to a share in their employer's profits. These are, probably, the concessions which the Government is obliged to make to the people, now that they are in the first flush of victory; but there seems no reason to suppose that they will be sanctioned by the National Assembly. As to the division of a portion of the profits among the workmen, it is not so dangerous a measure as it may appear; for it has already been adopted in this country with great success. The Orleans Railway, for instance, has always allowed a not inconsiderable portion of its annual profits to its *employés*, dividing it among them in proportion to their respective salaries.

The following is the return of the imports made in the month of January last:—Copper of the first fusion, 6757 metrical quintals, of which 3674 were from England, 1687 from Chili, and 1390 from other places. In the January of 1847, the importation from England was 3992 m. q., and from Chili *nothing*. The import of tin in January last was 1578 m. q. The importation of cast-iron was 78,024 m. q.—of which 35,876 were from England, 40,634 from Belgium, and 1514 from other places. In the same month of 1847, the import from England was 27,999 m. q., and from Belgium 33,658. The importation of coal in January was 929,762 m. q.—of which 325,373 were from Belgium, 465,674 from England, 138,602 from the German Zollverein, and 113 from other places. In January, 1847, the import from Belgium was 856,917, England 257,851, German Association 126,631, and other places 443. The importation of lead in January, 1848, was 16,266 m. q., and of zinc 13,435 m. q.

The new Government will, on the 1st April, receive offers for the supply of 60,000 hectolitres of coal for the forges at Cherbourg; and on the 18th of this month, for 10,000 kils. of *étain banca*. The contracts which were to have been received on the 11th at Rochefort, have been postponed.

No little excitement has been created in the mining districts by the attitude assumed by the mining population, in connection with the recent events. At Anzin, and in the basin of the Loire, in particular, the men struck for an advance of wages. After some hesitation, the companies granted it; and, at the date of the last advices, it was believed that the men would return calmly to their work. The mining population in France is rather turbulent; but it is not difficult to satisfy with reasonable concessions.

The letters from St. Dizier state, that there were no quotations of iron last week, owing to the anxiety felt with respect to political matters. They state, however, that *all the iron-works were in operation as usual.*

P.S.—On the Bourse, to-day, an improvement took place—the closing price of the Fives being 52 fr.; of the Threes, 73 fr. 50 c.—*Paris, Wednesday.*

TO THE SHAREHOLDERS OF THE WEST CORNWALL RAILWAY.

"NIL DESPERANDUM."

Having, on several former occasions, drawn your attention to the unhappy position of affairs connected with this undertaking, and being instrumental in establishing a committee of gentlemen, who have heroically undertaken the task of organising an opposition to the powers that be, or rather that were, for the purpose of investigating the concern, I beg to address you again on the subject. The gentlemen composing the deputation, whom we sent up to the special and general meetings, performed the duties with which they so obligingly charged themselves, with the most praiseworthy zeal and useful effect. The committee, which, through the exertions of our deputation, have been appointed by the general meeting, will, no doubt, devote their best attention to analysing the financial state of the company, and to giving us their candid opinion and advice at the adjourned meeting, to be held on the 5th proximo. What that advice may be, I cannot predict; but I think we have now obtained such an amount of information as ought to increase our confidence in the ultimate success of the scheme, if it be carried out. That it may be carried out, and that without any unnecessary delay, is the object I have in view in thus addressing you. Never despair, gentlemen, as the motto intimates, in a good cause. There are some, I fear, who, looking at the present state of the money market, and the extraordinary position of political affairs, are prepared to advocate an abandonment of the undertaking, from a fear that the money requisite for its prosecution will not be forthcoming. They would thus not only sacrifice the amount that has been already spent, but another call, at least, must be added to that loss, in order to liquidate the present liabilities from which we cannot escape. Thus, one-third nearly of the original capital would be sacrificed, and for what? Absolutely nothing! Whereas, if we go vigorously to work, and make the small line, proposed by the directors, from Hayle to Penzance, which can be accomplished for about 80,000*l.*, all the money which we have already paid, together with this additional sum of 80,000*l.*, will yield us 7 per cent., derivable from the profits of the present Hayle Railway and the extension to Penzance.—*Vide* the chairman's speech at the last meeting. Yielding 7 per cent., or even 6, I ask, would not our shares be at par at least, if not at a premium? Would it not be very bad policy, indeed, to abandon a line in order to avoid the payment of three or four calls more, of 2*l.* each, when we find it capable, by such a small additional outlay, of realising such profits as would certainly restore to us not only all that we may be called upon further to expend, but all our past outlay, which at present is nominally lost? The Cornwall line will now, without doubt, be made at least from Truro to Falmouth and to St. Austell. By the time, then, that our main line shall have been completed from Truro to Penzance, there will be the valuable traffic of those important towns ready to flow westward over our line. Who shall say, with truth, that we shall not then realise 10 per cent. on all our outlay in this undertaking? I, for one, think it more than probable. Away, then, with the notion of abandonment! No, with the good men and true, proposed by the deputation, for the new directors, there can be no doubt of our property becoming valuable, of our interests being faithfully cared for, and of our lines being economically made! That there has been already much discreditable jobbing in the purchase of the Hayle Railway is unquestionable—there is, however, some hope, that the gentlemen now connected with that concern will consent to more equitable terms; but should they not act the part of generous creditors, still, *nil desperandum*, we shall, if you will but promptly pay your calls, soon have a good return upon all the capital we shall have spent on the line. To effect this desirable object, however, you must strenuously support the Launceston committee, who have no sinister end in view—the only aim of their endeavours in this matter being the general welfare of the company, which they think can be promoted by no means so effectually, as by an improvement of the board of directors.

Should any one hold an inconvenient number of shares, let him commend the undertaking to some of his friends, and induce them to take a few off his hands, which may be done upon the understanding, that if the line pay 6*l.* per cent., they will repay him the full amount he now sacrifices in giving them up. If it fail to do this, then the shares should become their absolute property, unshackled by any contingent return. By this means, fresh vigour would be instilled into the company, as 10 persons may easily accomplish that which five or six may find too difficult. In this way, many of the forfeited and unappropriated shares might be disposed of. After due notice shall have been given to that effect, all the shares, on which the first call and deposit have not been paid, should be declared absolutely forfeited; and, when so forfeited, they should be offered, *pro ratâ*, at 4*l.* discount to the proprietors, who have paid all the demands on their own shares. This plan would soon disseminate the forfeited shares among good men, and we should find our finances in a flourishing condition. I am a holder of 40 shares, which I purchased at a considerable premium, and have paid all the calls on them but the last, which I withhold for the present for obvious reasons, but which I shall be ready to pay, as soon as the board has been properly re-established. I know many who are acting on the same principle, who would be glad to discharge their obligations when matters are set right. There is one point more which I would urge upon your attention, and that is a local board. Depend on it, its utility, in an economical point of view, would, if adopted, be established to an extent, which few persons, unaccustomed to these things, would imagine possible. Accept, gentlemen, these hints with that candour which their object ought to inspire, when I assure you that, in conjunction with my own, it is your welfare, as identified with this undertaking, that is thus fully advocated by—AMICUS: *March* 6.

A deputation of the iron trade of South Staffordshire, on the Health of Towns Bill, had an interview with Viscount Morpeth yesterday, at the office of her Majesty's Commissioners of Woods and Forests, Whitehall-place. The deputation consisted of Lord Ingestre, Hon. C. Villiers, Mr. Thornely, Hon. E. Littleton, Alderman Copeland, Colonel Anson, Mr. Sparrow, Mr. Phillip Williams, Mr. Ward, and Mr. Barker.

THE NITHSDALE IRON-WORKS.—The iron-works now in course of erection at New Cumnock, in the Vale of Nith, are likely to alter the character of this hitherto secluded neighbourhood. The new iron-works are situated on the property of Mr. Hyslop, about a mile from New Cumnock. The furnaces are partly erected, as well as a little town of workmen's cottages, called Craig Bank; and the railways, &c., in connection with them, are going on steadily towards completion. The mineral property taken by the company is extensive, and abounds with coal and ironstone. The clay ironstone seams are in great abundance, and have been hitherto considered as the source from which the company were to derive their supply of ore. A discovery made a few days ago by Mr. Dickinson, the managing agent, of two seams of excellent black-band ironstone, each 18 inches thick, and lying within 3 feet of each other, is now, however, likely to open out more extended views to the company.

DUCKMANTON IRON-WORKS.—A report has been prevalent, during the last few days, that this important establishment had recommenced working, but we are sorry to state that the information was premature. The mistake most likely arose from the fact, that some of the ironstone miners had resumed their employ, it being expedient to keep some of the pits in a state of workmanship, to prevent their getting dilapidated. We, however, hope that, in the course of a fortnight or three weeks, to be enabled to give better news respecting the works themselves.—*Derby Mercury.*

THE LEICESTERSHIRE COAL FIELDS.—These fields (from which the counties of Rutland, Stamford, Peterborough, and the neighbourhood, will, on the opening of the railway now in course of construction, derive their principal supply of coals) extend under a surface, in that county alone, of 35,000 acres—viz.: from Lount in the north, to Bagworth (and probably further) in the south, and from Coleorton and Whitwick in the east, to Onkthorpe and Swepstone in the west, and there is little doubt that they unite with the Derbyshire and Warwickshire fields. Nearly the whole of these coals are accessible for getting. The Derbyshire coal from Clay Cross, near Chesterfield, and other places, will be, immediately on the opening of the railway to Peterborough, brought along the line. Stamford formerly was supplied with coals by sea and the River Welland, and by canal from Derbyshire; but since the opening of the Leicester and Swannington Railway, about 17 years since, the Derbyshire coal has, in a great degree, been supplanted by that of Leicestershire; and there is little doubt that sea-coal will, ere long, be entirely superseded in the neighbourhood. Considerable quantities may also be expected from the Nottinghamshire pits by the Erewash Valley Railway to the Midland line.—*Nottingham Mercury.*

EXPERIMENTS ON COAL—STEAM NAVY ECONOMY.

With reference to the increased estimates for the navy, Lord J. Russell remarked, that though the application of steam to ships-of-war had rendered a country more liable to be attacked, it also enabled that country to adopt surer modes of defence. The remark was intended as an apology to the House of Commons for the augmented estimates; it ought rather to have impressed upon Ministers, in their offices, the necessity of reconciling, in the adoption of this means of defence, efficiency with the dictates of a wise economy. Many circumstances contribute to give a nation greater or less power to establish a steam navy. Among these, none are more important than the capability of obtaining fuel possessing the proper qualities for naval purposes, and at a moderate expense. The efficiency of a steam ship-of-war depends much upon the quantity and quality of fuel with which it is furnished. The characteristic properties of coal suited for steam purposes at sea, are very different from those which might give it a reputation on land. A soft coal, well adapted for stationary steam-engines, would soon be pulverised and rendered useless by the attrition which it suffers in the bunkers of a ship constantly in motion. A fuel fitted for the production of steam may, from its structure, take up so much space that the vessel could not carry a quantity sufficient for a long voyage. The difference, in this respect, between coals of equal evaporative power, is frequently 20 per cent.; that is, where one ship could carry 1000 tons of a good fuel, others of the same size, but without this careful selection, could take no more than 800. It is of comparatively little importance to the consumer of a fuel on land (whatever it may be to his neighbours), whether or not his chimney sends forth clouds of opaque smoke; but the emission of this dark vapour into a clear atmosphere at sea, betrays the position of a ship-of-war at a great distance, when circumstances may render it of the utmost importance that the locality should be concealed. And it is obvious, that great waste or needless expenditure must be occasioned by want of due care in selecting the proper kind of coals.

The attention of all maritime nations has been drawn to the extreme importance of acquiring a full knowledge of the fuel available for the purposes of their navies. To America belongs the credit of having first instituted, on a large scale, an extensive series of experiments, with a view not only to become acquainted with its own resources in fuel, but also to contrast it with the principal kinds of coal used in England. One report has already appeared, containing the results of this investigation, and a second still larger one is stated to be in the press.

The importance of such an inquiry to the United Kingdom, possessing colonies to which, as depôts, fuel is sent for steamers, and the still greater utility of developing the resources of these countries themselves, in order to ascertain how far their industry is likely to be affected by the possession of fuel, which renders the parent country so rich, has long engaged the attention of various departments of Government. The East India Company has employed a well qualified geologist, with a numerous staff of officers, to survey and report on the coal measures of India; and it is understood that some important coals are being sent over to this country for trial. Similar investigations have been made by the Admiralty at Borneo, which have resulted in the discovery of the important coal-beds on the coast of that island, and in Labuan. Good coal has also been obtained in Vancouver's Island, and in Formosa; and a most excellent kind has been transmitted to this country from Sydney, and from other parts of the world.

The Admiralty, at the suggestion of Mr. Hume, have entered into extensive experiments on the coals of the United Kingdom, and of some of the colonies, the first report* on which has been presented to both Houses of Parliament. The inquiry has been undertaken, and gratuitously superintended, by the officers of the Museum of Practical Geology in the department of Woods and Forests. In the report now before us, attention has been principally confined to the coal-beds of South Wales, from the circumstances that, in that country, every kind of coal, from the most anthracitic to the most bituminous variety, can be obtained. Steam ships-of-war have long been accustomed to procure their principal supplies from Wales; and the Admiralty were desirous, in the first instance, of procuring a knowledge of various kinds, having a general or local celebrity in that part of the kingdom.

A fuel, fitted for the navy, ought to possess a combination of good qualities which are rarely found united in the same coal. Among these, the most important is the power of generating a large quantity of steam with a small expenditure of fuel. A steam ship-of-war, supplied with wood, which cannot convert more than four times its own weight of water into steam, would be useless for a long cruise, unless the capacity of its bunkers were much greater than that now allotted to them. But the difference between wood and average coals is not greater than that between them and the superior varieties. As a mean result, ordinary coal may be taken to convert seven times its own weight of water into steam, while the best kinds of Welsh coal evaporate twelve times their weight. This fact, practically applied, shows that two ships, of equal size, starting at the same time, one of them supplied with common, the other with superior coal, would be very unequal in their efficiency for special service—the former being only able to cruise for seven weeks, while the latter could stay out twelve weeks without returning to the depôt for coal. It is needless to remark that, in the case of war, one of these ships would have an immeasurable superiority over the other. Hitherto the Admiralty have not sufficiently attended to the quality of coal supplied to steam ships-of-war; and grievous have been the complaints of those intrusted with their navigation. It is not enough to order coals from a particular colliery, celebrated for its produce, unless some means exist for securing it of a constant quality; for, from the same bed, worked at different times, fuel of very varying character is obtained. We are, therefore, glad to see that much attention has been devoted in this Parliamentary report to simple methods for the ready identification of coals, as a means of securing to the purchaser fuel of a certain standard value.

We shall again bring this report under the attention of our readers, more especially as regards the internal resources of this country, although the researches on foreign coal are scarcely of less importance. It must be gratifying to the projectors of steam communication between England and Sydney to learn that coal, equal to the best Welsh varieties, may be obtained at that place. Any future naval war—and such a contingency, much though we deprecate it, is still within the range of possibility—must, in a great measure, be conducted by steam-vessels, and their efficacy greatly depends upon the facility with which their fuel is provided; to which end depôts, judiciously selected in different dependencies, will be requisite. Much might be said upon the imperfect arrangements now existing in this country for supplying steam-vessels with coal at our dockyards, especially on an emergency, when promptitude is required. In fact, the provision for a sudden demand of this kind is wholly inadequate to the wants of the service; but, as the subject is already receiving serious consideration, we content ourselves with drawing public attention to the state of our foreign depôts. Instead of sending to them in perpetuity, at a heavy expense and with much risk, quantities of coals, which, in hot climates, suffer a great and rapid deterioration, it is a wise policy to develope the colonial resources. Such a measure will be conducive to ends of immeasurably greater and more lasting consequence than preparations for war: it will give an impetus to the development of the resources of the colonies, and their application to industry: it will facilitate our commercial intercourse with them, and the interchange of the communication; and will, by increasing their riches, make them more profitable markets. Until our knowledge of their mineral wealth is much more extended than it is at present, it would be rash, however, to depend upon it alone. It, therefore, becomes a matter for grave consideration by what means the coals shipped abroad may be preserved from those changes which so much reduce their value for steam purposes. All kinds of coal do not depreciate in value by being kept, and, therefore, considerable economy might be effected by their careful selection. The causes of the diminution in their power being known, it is possible to avoid its occurrence altogether by preparing certain kinds of artificial fuel from coal of well known properties. Prepared fuel of this kind is now being extensively used by the Admiralty, especially for transmission to foreign depôts, and the importance of a proper comprehension of this new, but already extensive, branch of our national manufactures, will induce us to recur to it in a distinct article.

* Report on Coals suited to the Naval Service, by Sir H. De la Beche and Dr. L. Playfair.

DISCOVERY OF LEAD IN CUMBERLAND—PATIENT SEARCH REWARDED.—Recently a fine large vein of lead ore was discovered in the manor of Hartsop, Patterdale, of which the Earl of Lonsdale is lord. It was found by a poor man, a miner, named Hodgson, who, for upwards of 25 years, felt convinced that there was a vein in the manor, and who, from time to time during that long period, has searched, and, at last, found it, and who has been presented with a share of it, as a reward for the discovery. The ore is of the best quality, and there is no doubt but that the company who are working it will realise large profits.

THE RENEWAL OF THE LEASE OF THE DOWLAIS IRON-WORKS.

Highly important intelligence has been received from Merthyr, in respect of the renewal of the lease by the Marquis of Bute to Sir J. Guest and Company of the lease of the Dowlais Iron-Works, which are among the largest iron-works, if not the largest, in the world. In consequence of the near termination of the lease, and the various negotiations which have been entered into for its renewal, having been fruitless, the most gloomy apprehensions prevailed throughout the neighbourhood as to the stoppage of the works, which could not but prove most ruinous to the entire neighbourhood, as at least 30,000 persons are dependent upon them for support; which will be better understood, when it is stated that the Dowlais Works comprise 18 furnaces, each employing 400 men, or 7200 in all, with the fineries, puddling, and balling furnaces, forges, rolling-mills, &c., for making every description of iron, and also founderies, workshops, for making engines, fitting-up machinery, &c., besides collieries, iron mines, &c., giving employment directly and indirectly to this vast population. The lease was for 99 years, and was to expire in May, the dispute having arisen as to the amount of the royalties to be paid for its renewal—the noble marquis contending that he was entitled to certain royalties, which he considered fair ones, for the princely fortunes that had been made at the works; Sir John Guest and Co. contending that the royalties claimed were too high, in consequence of the distance of the works from the sea, and from the fact of the iron mine near the surface being used, and their thus having to go deeper in search of it. Each party being equally obstinate, and the settlement appearing hopeless, the work of destruction at the works was commenced. Six of the furnaces were blown out, thus throwing out of work directly 2400 men. Several of the pits, with their engines, were removed, miles of tram-plates were taken up and melted, the colliers and other workmen had notice, and nothing but ruin stared them in the face; when, on Saturday, a letter was received at the works from Sir John Guest's nephew, Mr. Hutchins, himself a partner, directing the managers not to blow out any more furnaces, and immediately to suspend the work of raising and removing the plant, &c.—also, to continue the works as usual until the 1st of May—and stating, as we hear, that if the lease was not renewed by that period, agreements had been entered into for the allowance of a reasonable time for the removal of all the fixtures and plant, allowable to be removed by law and by the stipulations of the lease.

These tidings spread universal joy throughout the neighbourhood, and the general belief is that the question of the lease may be said to be virtually and satisfactorily settled, but that Sir John Guest had hesitated to permanently announce it, fearing the probable consequences that might arise from the overjoyed workpeople being driven into drunkenness and other excesses. Many, indeed hundreds, of the workmen had built or purchased houses for themselves in the neighbourhood, which, in addition to their being deprived of their work by the stoppage of these extensive iron-works, would have been rendered completely valueless, so that the ruin and desolation which would have been spread around would have been fearful.

COAL TRADE OF AMERICA.

From the official returns of the anthracite coal trade, we learn that the quantity supplied during the past year, in comparison with 1846, was—

	1847.	1846.	Increase.
Schuylkill, by railroad ..... *Tons*	1,360,681	1,233,562	127,119
" canal	222,693	3,440	219,253
" Pinegrove	67,457	58,926	8,531
	1,650,831	1,295,928	354,903
Lehigh	643,973	522,989	120,984
Lackawana	388,203	320,000	68,203
Wilkesbarre	284,398	192,503	91,891
Shamokin	14,904	12,572	2,336
Total tons	2,982,309	2,343,992	638,317

And showing a majority for Schuylkill over the other districts of 319,536 tons, and which, since the commencement of the trade, in 1820, has supplied 10,213,120 tons, while all other regions have sent only 8,580,480 tons.

In 1820 the whole trade amounted to 365 tons; in 1830 it had increased 112,082 tons; and in 1840 to 860,017 tons. Since that period the increase had been prodigious—the total supply in 1847 having been 2,982,309 tons, or an increase of more than 300 per cent. in seven years! During the past year, the increase over that of 1846 has been 638,317 tons, or a greater amount than the total trade of the first 12 years of its existence. The value of the coal sent to market in 1847, at tide water, amounts to the sum of 12,000,000 of dollars. The tonnage engaged in this trade is also larger than that employed in any other single branch of business. In 1846 there were 1 ship, 17 steam-boats, 25 barques, 475 brigs, 4474 schooners, 1113 sloops, 1114 barges, and 1150 boats, besides 282 vessels (class not specified), cleared from this port: total, 8953 vessels, laden with 1,065,228 tons of anthracite coal, besides the quantity shipped in boats from the Lehigh mines, *via* Bristol, to New York and other places.

Notwithstanding this immense increase in the production of the United States, the importation of foreign bituminous coal has not sensibly diminished. Always with considerable fluctuation from year to year, the highest, within the past 10 years, was in 1839, 181,551 tons; the lowest, in 1843, 41,163 tons—while, in 1847, the importations were 148,021 tons.

INCREASE OF STEAM-POWER IN THE AMERICAN COAL TRADE.

The following is a statement of the number of steam-engines employed in the coal districts for the three last years respectively:—

Years.	Engines.	Horse-power.
1845	98	2018
1846	106	2921
1847	167	4465

Showing an increase of horse-power of 1846, over 1845, of 903 horse-power; of 1847, over 1846, 1544; and 1847, over 1845, 2447 horse-power. There are in Schuylkill county alone 206 steam-engines; while, in the whole of France, a country containing 34,000,000 of inhabitants, there were, in 1845, only 207 engines. As a considerable portion of the above engines, of 4465 horse-power, run day and night, they may be estimated as performing the labour of 44,650 men.

JOINT-STOCK BANKS.

The following table shows the relative capitals and extent of business of the various joint-stock banks in London, made up, in each case, from the accounts last furnished:—

Banks.	Paid-up Capital.	Deposits, &c.	Guarantee Fund.	Dividend last half-year.
London and Westminster (established 1834)—five branches	£988,882	£2,747,286	£100,647	3 per cent.
London Joint Stock (established 1836)—one branch	600,000	1,971,912	123,759	3 per cent. and bonus of 7s. 6d. per 10*l.* share.
Union of London (established 1839)—two branches	422,900	2,510,064	39,650	3 per cent.
London and County (established 1839)—44 branches	200,600	1,225,120	25,616	3 per cent.
Commercial (established 1840) one branch	128,280	409,925	14,825	3 per cent.

NOVELTY IN THE APPLICATION OF STEAM-POWER.—On Wednesday week Messrs. A. and A. Shaw, of Park-mills, Shaw, near Oldham, gave an entertainment to their numerous work-people, and a large circle of friends, in the new buildings recently erected by them, on the occasion of the first starting of four new and powerful steam-engines. The engines were made by Messrs. E. and J. Taylor, of Marsden, near Huddersfield, and do great credit to their mechanical skill. Each engine is of upwards of 80-horse power, but the chief point of interest connected with them, arises from their all being united together in one engine-house, a thing never before witnessed in this country. The whole power of the four engines is concentrated at one point, and works so that two cranks are up and two down, and thus obviating the hitherto existing weakness of the ordinary engines, where the desideratum is supplied by the momentum of the fly-wheel. Their first trial, combined in this manner, was looked forward to with some anxiety; and at the time appointed for starting, a large number of spectators, including the owners, the makers, and several ironfounders of the district, assembled to witness their first efforts. At a given signal the steam was turned on, and the whole moved together in the most perfect unanimity, eliciting marks of approbation, and affording conclusive evidence of the complete success of this "quadruple alliance," where uniform motion is indispensable. After being fully satisfied of the undoubted success of these iron Goliahs, and the proprietors having, according to custom, with all due honours, bestowed upon the engines the name of the "United Brothers," the whole party adjourned to the large building, where the evening's entertainments were kept up until a late hour.—*Leeds Mercury.*

Original Correspondence.

RECENT DISCOVERIES IN ELECTRICITY.

SIR,—Your Journal of Saturday last contains a letter from Dr. Murray, of Hull, upon the subject of my recent discoveries in electricity. I beg to offer a few words in reply. The writer commences by saying, he "had never supposed that any modern electrician doubted, that the explosive phenomenon of the thunder-storm was in any way analogous to that of the Leyden jar." Such doubts and counter opinions have, however, been entertained and promulgated by eminent men—not only in modern times, but from the period when the electrical character of lightning began first to be understood. So far back as 1749, Dr. Franklin says, in a letter to Mr. Collinson—"When a gun-barrel, in electrical experiments, has but little electrical fire in it, you must approach it very near with your knuckle before you can draw a spark; give it more fire, and it will give a spark at a greater distance. Two gun-barrels united, and as highly electrified, will give a spark at a still greater distance; but if two gun-barrels electrified will strike at 2 inches distance, and make a loud snap, to what a great distance may 10,000 acres of electrified cloud strike and give its fire; and how loud must be that crack?" This sentence was written three years before the identity of lightning and electricity was experimentally demonstrated, and three years after the discovery of the Leyden jar had been made. Yet there is no mention of the Leyden jar here, but there is a very pointed and unequivocal allusion to the prime conductor of an electrical machine. Again, in the 77th vol. of the *Philosophical Transactions*, we find an account of a tremendous thunder-storm, attended with some very remarkable phenomena, which took place on the banks of the Tweed in 1785; and the subsequent explanation of these latter, which was offered by Earl Stanhope, and which is to be found in the same volume, is based upon similar views of electrical action, as those which seem to have been entertained by Dr. Franklin; but to come to a more modern instance.

The sixth number of the *Proceedings of the London Electrical Society*, contains a paper "On the Action of Lightning Conductors," by Mr. Walker, late secretary of that body, and now superintendent of the electric telegraph on the London and South-Eastern Railway. In this essay the author endeavours to show—"1. That the discharge of a Leyden jar *does not* resemble a flash of lightning; and, therefore, that Leyden jars should not be employed in these experiments.—2. That the discharge from a prime conductor *does*, in all essential points, resemble a flash of lightning, and *is*, therefore, admissible in these experiments."

In quoting these theories and opinions, I wish it to be clearly understood that I do not, in the slightest degree, participate in the recognition of any physical difference, except in point of degree, between the condition of the electricity accumulated in a Leyden jar, and of that accumulated upon a prime conductor. In the one case, we have inductive action directed across a thin plate of glass; in the other, through a stratum of air of indefinite dimensions; but beyond the mere thickness and quality of the interposed dielectric, there is no true logical distinction to be drawn between the two cases under consideration. In consequence of my paper having reached your correspondent in an abridged and unillustrated form, the meaning intended to be conveyed has been misapprehended in two or three instances. For example, Dr. Murray speaks of "the *proposed theory*, according to which the thunder cloud is composed of a series of concentric belts, or zones, in alternations of position and negative electricity. The central nucleus being the maximum, and the zone furthest from the centre the minimum of intensity." Now, there is no theory whatever about this—it is matter of established fact: was first proved by Mr. Crosse, of Bicomfield, and was afterwards fully confirmed by Mr. Weekes, of Sandwich. I refer for a full account of the investigations of these gentlemen to *Noad's Lectures*, p. 92-96.

In another part of the letter there is an expression of surprise at no reference having been made by me to induced electricity. This omission was intentional, and arose out of the following considerations:—1. INDUCTION is a *necessary and inseparable consequence* of the presence of free electricity; and as there is not a single known instance wherein this cause and this effect can be separated *for one moment of time*, I deemed its very mention superfluous, unless, indeed, it had been accompanied by some peculiarity of action, which is not here the case; and 2, I felt I was communicating with a body of men who needed, less than any other in the kingdom, instruction upon this part of the subject. To the fellows of the Royal Society, we are indebted for an immense mass of those facts and inductions which constitute the science of electricity; and to one of them more especially, for a complete analysis of inductive action. (Dr. Faraday: *Researches*, 11th, 12th, and 13th series, 1837-38.) The truly active peculiarity in a thunder cloud, and in the artificial arrangement under consideration, lies not so much in induction, which is a power exercised in the ordinary way, as in something else not hitherto understood, which I have succeeded in developing, and which I shall have great pleasure in explaining on some future occasion. With regard to that portion of your correspondent's communication, which refers to the production of electric circles and landscape drawings upon surfaces of non-conducting matter, I do not precisely understand whether they were produced by any novel means, or were merely repetitions of the experiments of Prof. Lichtenburg, of Gottingen, whose ingenious device was afterwards adapted to the production of figures upon steel plates, by Mr. Haldat, of Nancy, by substituting a magnetic pole for the knob of an electrified jar.

London, March 9. ISHAM BAGGS.

THE STRIKES OF WORKMEN IN THE MINING DISTRICTS.

SIR,—In your Journal of the 26th of Feb., I endeavoured to prove the cause of strikes among men in the mining districts; the glorious revolution in France immediately afterwards, shows I was not far wrong in attributing it to a want of sympathy, which ought to exist between employer and employed. Although the feelings of men may be blunted, and they may suffer long and much, still they nurture up the idea of a day of retribution, and pay they, will when time and opportunity offers. Human nature is such, that it must, and will, be cared for and protected. If one part of the community were born expressly to suffer and be slaves to the other part, then they would only be fulfilling their destinies; but as we find the poorest of men possessing ideas as grand and elevated as the well-tutored and richest noble in the land, it seems quite clear, that the Almighty never intended that the one should be treated like a brute by the other. I trust that all such ideas will be banished in future, and that the working man—the bee that makes the honey—will be allowed to sip his fair portion of it, and take his place in society as one of its strongest links. How patiently our industrious and half-starved labourers have borne their unhappy condition this winter! How many are still suffering from want of work and hunger, while the country is teeming with money! Were the Government as anxious to provide bread for the people as they are to tax them, and support a host of tyrants, who cannot find shelter in the land of their birth, and who were, a very short time since, busy in endeavouring to involve us in a murderous and destructive war, merely to attract the attention of the people from their own evil doings—I say, were the Government so disposed, our workmen would not be idle, nor suffering, as they are at present, to see money in piles lying useless, while its circulation would produce health, comfort, and plenty, and yet return undiminished. Pass it through the circuit of the globe, through millions of hands, will it diminish sensibly? You cannot eat it to appease hunger; it is, therefore, merely a representative—so would a piece of slate, or a piece of paper, be the same, if it was so acknowledged. If, then, it is the talisman that extracts everything out of the earth, the more it is used the more useful it becomes.

What are all the works we raise, the food we grow, and the clothes we make, but a mere amount of human labour? Why, therefore, should this gold lie in mouldy cellars, or in dusty heaps, when it can make the heart of man rejoice, and stimulate him to do good? But it is as I said before—the want of sympathy, good faith, and good will, among us that cause all this misery. Let the Government care for their people, who, after all, compose their strength, instead of pandering to the exorbitant wants and demands of royalty, and its dependencies—heaping burdens on the people they cannot bear, and plunging them into misery, want, and despair. Instead of devising schemes of war and idle fears, let them spend money in something more likely to bring a return than cannon balls and powder; let them establish boards of agriculture, mining boards, railway boards, and create implements of usefulness, instead of implements of destruction; and other nations will follow our example, and the world will begin to see that peace is more profitable than war—and that the most lowly man in the country is worth caring and providing for. The time is coming when working men will be looked upon with more kindness and brotherly feeling than they are at present. The poor illiterate miner and collier will get information and food, and yet be able to hold

up his hand and have a voice in the welfare of his country. The degraded, humble, miserably-paid agricultural labourer, will yet have proper remuneration and food, and instruction. To those who employ great numbers of men, this doctrine may appear unpalatable; but they will feel its benefits, if they try it, and be surprised they had not seen it before. Just arrangements between masters and men will effect this. Give a labourer 1s. 6d. per day to support himself and family—what amount of physical strength can he possess from the scanty meal this will procure him? He is not able to do half-a-day's work; give him 2s. 6d., and he will do twice as much, and there will be a saving, not calculating the satisfaction to both. In conclusion, could we only bring ourselves to observe the golden rule, of "Do as ye would be done by," the difficulty would then be over.

Abergavenny, March 6. A WELL-WISHER TO HIS FELLOW-MEN.

SANITARY REFORM—SEWAGE.

SIR,—In your valuable Journal of the 26th Feb., there appears a letter upon the subject of "Sanitary Reform," in which your correspondent suggests that, amongst other projects, the one proposed by me (of which he appears to think very favourably), for the adoption of the "London Sewage Company" (the title has been changed to that of the "Great London Drainage Company,") should be considered; and in your Journal of the 4th inst., one of your correspondents appears to think that too much was said in favour of my plan, and engaged, if you will supply him with my reports, to prove the ineligibility of the plan proposed by me, "as well as point out a method of sewage and drainage, at once *cheap*, efficient, and comprehensive—one that, with an outlay of 1,000,000*l.* sterling, would yield a net annual profit, from *one-fourth* of the metropolis, of 370,000*l.* per annum," &c.

As my plan has been thus introduced to you, I trust you will allow me a little space in your paper for a few observations; and, as I conceive that your object, as a public journalist, is to endeavour to promote the project that is really the best for the public, so it is necessary all should be submitted to you; and, as your last correspondent has promised a better plan than mine, upon condition of his having my reports, I take the liberty of forwarding you copies of them, that you may have his project and other schemes than those originating in what he is pleased to term "one-sided notions." I trust, however, that, when *he has read my reports*, he will give me credit for endeavouring to suggest the best plan I could; and I will answer for it that, when he has published a description of his plan, if it be superior to mine, public opinion will settle the point between us. I am, however, rather fearful that his estimate of 4,000,000*l.* sterling for the *whole* of the metropolis, notwithstanding the tempting promise of 37 per cent. net profit, will be considered by capitalists as far too high.

I may, perhaps, be allowed to observe that, in the plan proposed by me, my first object is, to *convey to a distance all the sewage of the metropolis, as soon as it is formed*, and there to treat in such a manner that it may be used in the liquid, solid, or high-dried form, which ever may appear the most convenient and profitable; but my first object is, to remove it *to a distance from the metropolis, without being allowed to see day-light, until its destination is reached*; nor do I think that any plan which has not this object in view, will ever be supported by the public. My second object is, to collect and extract the valuable manure, obtainable from the sewage water, in such a form that it may be most marketable, and to dispose of it at such a price that the proprietors may obtain a net profit of 10 per cent.—not 37 per cent.

The advantage that the public will derive from the adoption of my plan, will be not only the riddance of a great nuisance, but also a great reduction in future sewer rates; for as my outfall for the sewers will be 29 ft. below the bottom of the present Ranelagh sewer, and 20 ft. 6 in. below *low*-water mark at Woolwich, all future sewers may be made of less dimensions than those which have hitherto been constructed, because a much greater fall will be secured. I am afraid of encroaching upon your kindness by extending these observations, which are, in fact, only repetitions of parts of my report; and as my object in addressing you at all, is to give the opportunity for a fair discussion upon the merits of *all* projects, and *not mine alone*, I will not trespass further, excepting to express a hope, that when the various schemes have been submitted to you, we shall have the benefit of your opinion upon their merits. T. WICKSTEED.

Old Ford, March 7.

THE HYDRAULIC TELEGRAPH.

SIR,—It is somewhat singular that "An Inventor" last week, and "Civil Engineer" the week previous, should have harped identically upon the same strings—for, through the medium of your valuable pages, the public have been treated with a similar harmony—chords, including compressibility, elasticity, friction, and a long list of *et ceteras*, none of which have (considering them comparatively) anything to do with the working principles of "Jowett's hydraulic apparatus." Should, however, any one, or even the whole, of these causes, which form a phalanx of suppositional obstructives, prove, upon lengthened lines, *really* impediments, the patentee, as I have before declared, is prepared by efficient remedies, tested by *experiment*, to dissipate them all most effectually. *Compressibility* or *elasticity* are so entirely dependent upon a *cause*, so completely unconnected with the principles of Jowett's patent, as to recommend me not to waste my time, or your valuable space, by saying more upon the subject, than that there cannot possibly be a *perceptibility of either* in the working of the "hydraulic telegraph," for the very cogent reason, that such *cause* will not be strained into action. By the laws of hydrostatics, it is determined that a fluid will not sustain a stronger pressure on one side than another, but will give way to any excess of pressure in a *moment of time*, and become equally affected throughout all its parts, submitting willingly to the percussive power in *that direction*, however they may deflect, which offers the least resistance—viz.: the end of the communicating tube which contains them. *Friction*, or *attrition*, except in glutinous bodies, is almost as next to nothing in water in motion; and I think, from the result of experiment, it may be fairly presumed, there can be no danger to be apprehended of the tubes bursting. A mile in length of tubing was laid down in coils in a lower apartment of a factory, then trained up its side, and again coiled in a second room, and so on to a third, which was filled with water, by means of a force-pump; and, on being acted upon by a piston, *double the diameter* of the tube, was found to yield in a *moment* to a pressure very little beyond that employed in the model of 24 ft. It is evident, by this test, that *friction* will never amount to a momentous impediment—for, by reversing the impulsive piston to a *less diameter* to that of the conducting tube, it seems reasonable to suppose *friction* will be avoided altogether. As to the impediment dreaded by "An Inventor," through *friction* in the cylinders, that is impossible; for the reason, that all intervening stations are cut off by means of stop-cocks during the period of communication—consequently, only two cylinders can be acted upon at a time.

March 9. E. J. P.

FIXED RAILWAY BREAK.

SIR,—In the notice in your last week's Journal of my patent for a break, &c., there is a mistake in the description of the method of carrying its principle into effect. The use of the screws is not to separate the body of the carriage from its frame, but to alter the distance which these together bear to the springs—that is, to hang the carriage higher, or lower, upon its springs—such alteration necessarily bringing whatever is attached at the proper distance into contact into the wheels. The vibration of the springs, when the weight they are bent to is suddenly taken off, prevents shock to the passengers and carriage; and the break being relieved during these vibrations, permits sufficient turning of the wheel to prevent its flattening and injury.

The arrangement of break, with two segmental portions for the lower part of the wheel, appears perfectly applicable to carriages, from the advantage of using up momentum when they are raised, and having the advantage of gravity to set them in gear for progress again. As one of these forms of break is in contact with wood-work, the introduction of water is to prevent ignition and injury to the carriage—an effect that has actually happened under present methods; the other form being a modification of strap for the wheel, and acting against it: the tubular arrangement is to maintain the efficacy of the break under the heat of friction. Whether the proposed method, or that of any other person, for the desired object, is the best, I will not venture to say; but this, perhaps, most will agree to—that until we possess good means of *retardation*, independent of diminishing power in preparation for stopping, the railway system must be kept back from its full development; as the economy of time for traffic between the termini must prevent such increase of stations and stoppages on the roadside, as would *create* the want of greater communication, and satisfy it; and also in the fear, that short of such improvement, some terrible occurrence will make those still indifferent to the subject, all at once alive to it, and obstructive in their means of remedying it.

Windsor, March 7. E. W. ETON.

VENTILATION OF RAILWAY CARRIAGES.

SIR,—In travelling on railways, we have necessarily to combat with, at least occasionally, the caprice or whim of individuals, who insist on the windows being kept entirely closed, especially should it be rather cold. This in some of the second-class carriages is very destructive to health; in not a few, indeed, there are no other means of obtaining fresh air, save by the windows; and though there may in others be superadded a perforated plate of zinc, or bars of wood, arranged in the manner of the "Venetian blind;" still these provisions, though admitting *fresh air*, leave intact the impure air of respiration to rankle within: a very simple arrangement will free it of the latter. In some carriages there are lamps from the roof, and these should be in all; nothing more is necessary than to have a circular row of orifices—connecting thus the atmosphere of the carriage with the wick flame.—J. MURRAY: *Portland-place, Hull, Feb.* 28.

IMPROVEMENTS IN THE STEAM-ENGINE.

SIR,—I herewith send you drawings, and a description of some of the details and modes of applying my patent valve with the expansive valve, especially the manner in which I apply it to my patent arrangement of parallel cylinders, the pistons of which move in opposite directions; so that one such engine is made to work without a fly-wheel, by the cranks being set at such an angle, that the crank attached to the large, or low-pressure piston, has passed sufficiently over the dead point, before that attached to the small, or high-pressure piston, has attained the dead point by which the motion is continued. The figures, from 1 to 4, show the manner this

Fig. 1.

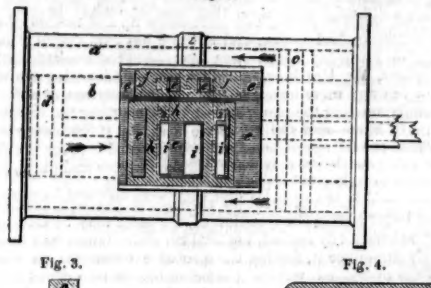


Fig. 3.

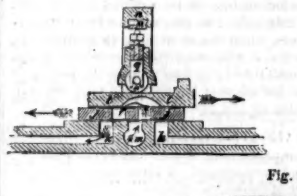


Fig. 4.

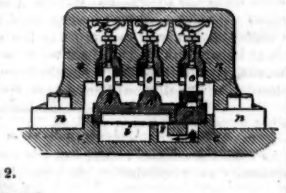


Fig. 2.

is effected. The cranks are not shown; but it will be seen that the large piston, *c*, which is supposed to be moving in the direction of the arrows, has passed some distance from the end of the cylinder—whilst *d*, which is the small, or high-pressure piston, is just starting from the opposite end of the cylinder, and in the opposite direction, as indicated by the arrow; *a* is the large cylinder, and *b* the high-pressure cylinder, supposed to be lying behind it; *e, e, e, e, e*, is the cylinder-face, on which the valves work, which serve for the ingress and egress of the steam from both cylinders; *i, i, i*, are the ports which lead to each end of the large cylinder, and also to the condenser, or atmosphere; *h, h* (see *figs.* 2 and 3), are the ports which lead to each end of the high-pressure cylinder; and *m* is that through which the steam comes from the boiler. In this arrangement, the high-pressure part of the valve is separated from the low; though in all cases, but when it is desired that one of the cranks should have the lead of the other (as shown by the pistons in *fig.* 1), the valve for both cylinders is cast together, and is, in fact, one valve; but, in the instance under notice, the dividing of the valve, and attaching the high and low-pressure parts to their own separate eccentrics—thereby admitting of a more accurate setting for the ingress and egress of the steam into each cylinder, so as to suit an arrangement of this kind; *h, h, h*, is the valve, belonging to the low-pressure cylinder, and, as seen in *fig.* 1, is in section—having the back of it removed, so as to show the manner in which the steam passes from the high-pressure to the low-pressure, and also from the opposite end of the low-pressure cylinder, *c*, to the condenser, or atmosphere. It will be seen, that the long port in the valve, *h*, encloses the port, *i*, and the smaller port, 2, which communicates with the high-pressure cylinder—and hence the steam which had previously driven the high-pressure piston to the end, or nearly the end of its stroke, is allowed to rush through the port 2 and *i*, and the long hollow in the valve, *h*, to the large cylinder, *a*; at the same time, the exhausted steam is allowed to escape through the ports, *i, i*, over the bridge, *e*; and, by means of the shorter, but wider, hollow, in the same valve, *h*, to pass off to the condenser; on the reversion of the valve, a reverse action takes place. The high-pressure valve is seen at *j*; it is also supposed, as there shown, to be in section, or with the back removed—it being much the same as the valves in common use, further description of it is unnecessary.

In diagram 1, it will be seen that each of the two valves are in a position corresponding to that of their respective pistons; the ports of the low-pressure valve will be seen to be nearly wide open, those of the high-pressure just commencing to open. It, perhaps, may be well to observe that, as the communication is formed with the high-pressure cylinder before its piston has quite completed its stroke, the steam will be thus far diminished in pressure, as it will now be made to act upon the two pistons. It is also necessary to remark here, that the communication with the boiler, and that end of the high-pressure cylinder, must first be closed; this can be done if the pistons are not desired to be much in advance one of the other in the common way—that of giving lead to the valve, or it may be effected by the expansive valve, as shown in *fig.* 3, which admits of the pistons being, if desirable, much in advance one of the other. In *fig.* 2 is shown how the expansive valve traverses with the high-pressure steam-valve, when it is not desired to cut off the steam; in *Fig.* 3 the mode of using it, when desired to cut off the steam at any part of the stroke in the high-pressure cylinder. *Fig.* 4 shows the communication between the small port, 2, which forms the communication through the low-pressure valve to the low-pressure cylinder, and also through the passages, *k, k*, to the high-pressure cylinder. In *figs.* 3 and 4 is shown the manner in which the valves are held to the face, *e, e, e, e, e*, by means of the friction rollers, *o, o, o*, which are supported by the bracket, *n. n, n*, in small sliding frames, *q, q, q*, provided with adjusting screws, which act against the springs, *p, p, p*, so as to press the valve to its face with a force slightly greater than that of the counteracting force of the steam. In this manner all unnecessary pressure, which in ordinary cases produces great friction and wear in the valve, is removed. The same letters refer to the same parts in all the figures. The order of the pistons may be reversed if desired—that is, the high-pressure piston may take the lead, instead of the low-pressure piston, as shown above. THOMAS CRADDOCK.

Birmingham, Feb. 29, 1848.

THE "GREAT BRITAIN."—At the meeting of the Great Western Steam-ship Company, at Bristol, last week, the expenses attending the recovery of the *Great Britain* was stated to amount, after deducting the proceeds of materials, to 12,670*l.* 14s. 1d. On her arrival at Liverpool, she was surveyed by Mr. Patterson and Mr. Field, of London, on behalf of the company, and by Mr. Grantham and Mr. Cassidy, on the part of the underwriters. The estimates for restoring her to the condition she was in previously to her stranding, were, for hull, masts, sails, cabins, boats, anchors, cables, &c., 15,886*l.* 5s. 0d.; machinery, 5808*l.*=21,694*l.* 5s. The directors stated, that an amicable arrangement had been come to with the underwriters at Liverpool, for an immediate settlement, on terms differing but slightly from the original claim; and that they had reason to believe the underwriters of Glasgow would be induced to settle on the like terms. After this had been effected, negotiations for her sale would have the best attention of the directors. The *Great Western* steam ship had been sold since the last meeting for the sum of 25,000*l.*, as she came from sea, subject to a deduction of 250*l.* for removing her to Kingroad, and replacing her paddle-wheels.

IMPROVEMENTS IN SEPARATING COPPER AND OTHER METALS FROM THEIR ORES

[Specification of patent, dated Sept. 2, 1847, granted to Henry Davy, of St. Mary's, Devon, for improvements for separating copper and other metals from their ores.]

Fig. 1.

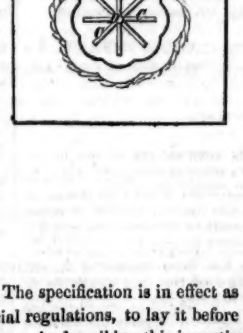
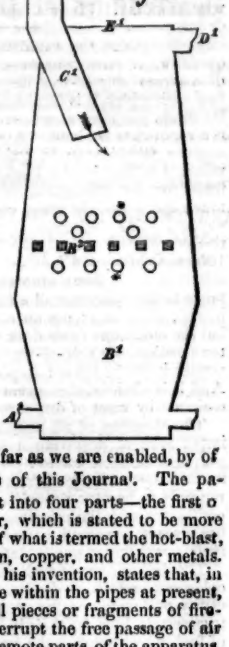


Fig. 2.



The specification is in effect as follows, as far as we are enabled, by official regulations, to lay it before the readers of this Journal. The patentee, in describing this invention, divides it into four parts—the first of which relates to an apparatus for heating air, which is stated to be more effectual and economical for the production of what is termed the hot-blast, employed in furnaces for the smelting of iron, copper, and other metals. The patentee, in describing this first part of his invention, states that, in some cases, it may be found sufficient to place within the pipes at present, or hitherto employed for the heated air, small pieces or fragments of fire-brick, or iron, in such quantities as not to interrupt the free passage of air amongst them; and, for the cooler, or more remote parts, of the apparatus, he proposes to employ pieces of copper, reddened or blackened by superficial oxidation, or otherwise; and, for the hotter parts, fire-brick, dipped in a solution of nitrate of copper, so as to produce a blackened surface, favourable to the radiation of heat. The patentee proceeds to state, that a similar result may, however, be obtained by employing a number of small pipes for the heated air, instead of one large pipe; and the upper or lower extremities thereof be made to terminate in one large chamber at the exit or entrance to the furnace; but the method which the patentee considers best calculated for effecting this, is the arrangement exhibited at *fig.* 1 of the annexed diagram, of which the following is a description:—A, A, marks brickwork, through the middle of which there is formed a flue, B, by the convex and concave surfaces, *a, b*, which, in practise, it is desirable to curve as much as possible, in order to obtain as great an amount of surface as possible in a small space; and the patentee, in forming such flue, proceeds in the following manner:—The surface, or lining, *a*, he composed of plates of iron; and the space between these and the brickwork are filled in with a stratum of charcoal, saw-dust, or other non-conductor of heat; and, concentric with the surface thus formed, places a pipe, *b*—the surface of which is of a corresponding shape to the former one; and the space between them is that through which the hot air passes. C, C, mark a series of radial plates, terminating in a fixed axis, D, and arranged, or disposed, in the peculiar manner exhibited, in order that the heat which radiates from the surface, *b*, may impinge against the surfaces of these plates, and impart caloric to the cold air which passes between them; and this apparatus may be used with or without a blowing machine.

The patentee remarks that, whereas in some cases it may be found necessary to heat the air to a greater temperature than the hot-air pipe and tuyere of the before-mentioned construction would bear. He proposes, in the hotter parts of the apparatus, to line it with sheet platinum, and form the pipe, *b*, of crucible ware, the inner surface of which he lines with platinum foil, and the outer surface he binds round with hoops, or bars, of wrought-iron, or bands of metal, wound about the pipe in a spiral direction; the surface of such hoops, or bands, he coats, or covers, with platinum foil, after the method of galvanism, practised by Smee, for the better radiation of heat. To preserve the platinum from the chemical action of the sulphur given off from the coal, where coal fuel is used, he proposes placing this pipe within another, composed of crucible ware. The *second part* of this invention relates to the roasting, or calcination, of the ores of copper, copper pyrites, or metals generally, which contain sulphur, by means of hot air, which should be heated to 700° Fahr., or more; and, further, to a saving of the sulphurous vapour, or acid, which may either be mixed with the roasted ore, and afterwards precipitated in a metallic state, and converted into sulphuric acid, by immersing plates of metal therein, or by any other of the known means for effecting its conversion. In describing this part of his invention, the patentee commences by stating, it is well known, that in furnaces where charcoal, or coke, is used, the fuel during combustion becomes mixed with carbonic oxide; and this, as it passes over, or through, the fuel above it, mixes with about an equal quantity of carbon, and forms "carbonic oxide gas," which, unless mixed with fresh air, does not burn until it arrives at the exit of the furnace, where it is burnt—and thus much heat and waste of fuel occurs. The patentee further states, that if coal be used instead of charcoal, or coke, then, in addition to the carbonic oxide, there will be a quantity of sulphuretted hydrogen burnt and wasted at the exit of the furnace.

The *third part* of this invention relates to the construction of blast-furnaces employed for smelting metals, in which the oxides and carbonates predominate; but more particularly the ores of copper known as the oxides and carbonates of that metal. The construction of the blast-furnace is as follows:—At the *fig.* 2 of the annexed diagram, A^1 marks the tuyere, which is situate near the hearth of the furnace; B^1, that part in which the ore and flux is situate, and in which it undergoes the process of smelting. It will be seen, upon referring to this diagram, that the neck of the furnace is furnished with bars or grating, B^2, which are capable of being withdrawn, and there are openings, *, made in the neck of the furnace, above and below the said bars or grating, for the passage of air and gases, the indraught being supplied to the furnace through the pipe C^1; D^1 marks the opening for charging the furnace; and E^1 is the cover.

The process of smelting is conducted in the following manner:—Fuel being placed in the furnace, and the bars afterwards placed across it, the ore to be melted is placed thereon, and when it has acquired a degree of heat such as will effect perfect combustion of the inflammable gases, the bars are then withdrawn, and the ore falling, by its gravity, to the bottom of the furnace, is there mixed with the ingredients necessary to effect fusion, when the furnace may be tapped, and the metal run off and cast in the usual manner; and, in conducting this process, the patentee states, that he takes a fair sample, and tests it by analysis, and if the silica in the ore bears the proportion of 5 of the iron and manganese to 7, it may then be smelted without the addition of flux thereto, provided it does not contain too large a quantity of other earthy substances; and he further states, that when these proportions do not exist, then quartz, sand, &c., must be added until these proportions are arrived at, so as to ensure the most favourable results; and the proper proportions may from practice be determined by the eye of the operator, without having recourse to analysis for that purpose.

The patentee states that, for the poorer and richer ores, it is necessary, for the proper conversion thereof, that they contain not more, however much less, than 25 per cent. of copper. Thus it will appear evident that, by constructing a furnace in this manner, any excess or deficiency of temperature may be obtained to effect perfect combustion of the inflammable gases; and a very good quality of metal may be thus obtained by one operation in the blast-furnace. A furnace thus constructed may be used in combination with a blowing-machine or not. The patentee, after fully describing the manner in which this invention is carried into practical effect, concludes by stating, that he does not claim the application of hot air to furnaces for the purposes of smelting; but claims the improved mode set forth and exhibited at *fig.* 1 of the drawing, by which the amount of heating surface is considerably augmented, without increasing the size

of the apparatus. And, further, he does not claim the producing of sulphuric acid from the ores of metals; but claims the improved mode set forth and exhibited in *fig.* 2, for that purpose, as also the roasting or calcining process. *Thirdly*, he claims the improved mode set forth of constructing blast-furnaces whereby the air may be admitted in any quantities, so as to effect combustion of the inflammable gases. *Fourthly*, and lastly, the mode set forth of treating the ores of metals in which the oxides and carbonates predominate.

Patent-office and Designs Registry, 210, Strand, March 6.

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY ....Banwen Iron Company—offices, at Twelve for One.
MONDAY .....North American Colonial Association of Ireland—offices, at One.
National Life Assurance Society—London Tavern, at Twelve.
TUESDAY .....Devon and Courtenay Consols Mining Company—at the mine, at Twelve.
London and Dublin Bank—London Tavern, at One.
THURSDAY .... Victoria Life Assurance Company—offices, at One.
Louvain à la Sambre Railway—London Tavern, at One.
SATURDAY.....Fleetwood and Furness Steam-Packet Company—offices, at Eleven.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

NEW BRUNSWICK AND NOVA SCOTIA LAND COMPANY.

The annual meeting of this company was held on Thursday, the 9th inst. at the offices, Copthall-court, City.

JOHN MOXON, Esq., in the chair.

The SECRETARY read the following report:—

In their report last year the directors stated that the emigrant applications for the season of 1847 were double those of the preceding year, and they stated their hope that the sales of land to English emigrants would exhibit a considerable increase; the total emigration from English and Irish ports in 1847, amounted, in fact, to 20,000 persons, or about three times as many as in ordinary seasons. As the ships were, however, freighted almost exclusively with Irish, in the lowest state of poverty and disease, the emigration of the more efficient classes of English and Scottish farmers and labourers fell much below the usual numbers. Under these circumstances the expectations indulged of increased sales of land have been disappointed. The number of acres disposed of in 1847, do not amount to more than 1819 to 19 purchasers; the gross sum of purchase money is 475*l.* 0s. 3d.; the highest and lowest prices being respectively, 20s., 12s. 6d., and 4s. 6d. per acre. The number of acres sold in 1846 was 3076. A comparison of the crops and stock belonging to the settlers, established on the company's tract, gives the following result—viz.:

	1846—167 *Settlers.*		1847—172 *Settlers.*
Wheat	*Bushels* 102		*Bush.* 451
Buck wheat	1705		2579
Oats	9663		11307
Barley	354		169
Rye	10		339
Corn and pease	111½		359
Potatoes	14833		18334
Turnips	4633		2136
Hay	*Tons* 840		*Tons* 796
Cattle	497		429
Horses	72		101
Sheep	538		432
Pigs	310		271
Land ploughed	*Acres* 235		*Acres* 201
Land cleared	—		3128

Considering that the harvest of 1847, in the province generally, was not so good as in the previous year, the comparative returns of produce in the above list are satisfactory. The decline in several items of stock is, perhaps, attributable to reduced wages, and employment in the lumbering trade. Capt. Hayne's estimate of expenditure at Stanley, in 1847, was 1855*l.* currency; and the sum actually disbursed having (as appears by the accounts now before the proprietors) amounted to 1662*l.* 19s. 7d., excluding 123*l.* 16s. 9d. paid for settlers' remittances, his calculation on that side of the account has been very nearly realised.

The receipts for the year—estimated by him at 2567*l.* currency—have realised no more than 1686*l.*; and having observed that his estimated receipts for 1847, and previous years, appear to have been founded more upon amounts due than upon those likely to be realised, the directors instructed Capt. Hayne, about the close of last year, to forward an estimate of receipt in future, founded as nearly as possible on items which can be relied upon. The result of these instructions is, that the Stanley receipt, for 1848, is calculated at 1170*l.*, and the expenditure at 1136*l.* 4s. 8d. If these estimates should be realised, there will be no necessity for any remittance from London. Immediately after the annual general meeting, in March last, the directors continued their correspondence with Capt. Hayne, with the view of devising measures by legal proceedings, or otherwise, for realising, if possible, more nearly than in former years the estimated annual receipt for land sold; and finding, about the end of April, that no receipt under that head could be relied upon beyond about 500*l.*—and considering also that the timber trade was undergoing a periodical decline, which might, probably, further affect the receipts—the directors proceeded once more to review the list of fixed expenditure, or salaries; and felt themselves compelled, although with much reluctance, still further to reduce the payments at Stanley, by which 105*l.* will be saved in 1848, almost altogether in the pay of the chief commissioner. The payments in London have been also subjected to revision, by which a further saving of about 50*l.* will be effected.

The estimate of the company's financial position in London, on the 31st Dec., 1846, was stated in the last annual report as follows—viz.:—

Loan due to the bankers	£1000	0	0
Probable balance debit against the company for 31st Dec., 1847	400	0	0
Total sum which might have to be provided for in 1848	£1400	0	0

The actual position and liabilities of the company, at that date, were as follows:—

Loans due to the bankers	£1500	0	0		
Two bills (130*l.* and 150*l.*) drawn from Stanley, due 1848	280	0	0	—1780	0 0
Deduct balance at bankers', 31st Dec., 1847				194	0 0
Total				£1586	0 0

which balance against the company exceeds the directors' estimate of last year by about 186*l.*

The debit on the Stanley balance-sheet, 31st December, 1846 (359*l.* 8s. 6d.), has, however, been paid off, leaving a balance in favour of about 50*l.* Under these circumstances, having further reviewed and reduced the fixed payments, and having regulated the company's affairs by the strictest, not to say the severest, rules of economy consistently with the maintenance of any establishment for the care of the tract of land and settlements, and feeling no expectation can be entertained for the present of a growing cash balance to the company's credit at Stanley, as expected by Capt. Hayne last year, the directors were compelled, although with the greatest reluctance, to resort to a call (the probability of which was discussed at the last annual general meeting) of 1*l.* per cent. Up to the present date the call has been paid on 132,950*l.* stock. As the subject of an annual charge, however small, upon the company's capital, will, probably, engage the serious consideration of the proprietors at the next general meeting, the directors present the following comparison of the balance expenditure for the last three years, extracted from the London account—viz.: 1845, 317*l.* 11s. 10d., including 36*2l.* received on colonial account; 1846, 860*l.* 15s. 3d., being for 227*l.* 12s. 6d. debtor Stanley account, and 633*l.* 2s. 9d. debtor London account; 1847, 425*l.* 5s. 5d., including 87*l.* 19s. 3d. received on colonial account.—The directors estimate the company's financial position, on the 31st December, 1848, as follows:—

Balance at Messrs. Williams, Deacon, and Co., 1st Jan., 1848	£194	0	0		
Proceeds of call of 1*l.* per cent.	1706	0	0		
Total receipts	£1900	0	0		
Payments—Loans due to the bankers	£1500	0	0		
Expenditure in London	430	0	0		
Two bills drawn from Stanley, due 1848	280	0	0	—2210	0 0
Probable deficiency, 31st Dec., 1848				£ 310	0 0

The surveys for a railway from Halifax to Quebec, through Nova Scotia, and New Brunswick, which have been carried on for some years past at the expense of H. M. Goocruwent, were at length concluded about October last. A line of railway from St. Andrews to Woodstock, on the west side of the St. John River, has been commenced, and another is projected from the city of St. John to Fredericton. Should the latter be carried out, the passage of emigrants from St. John to the interior, towards the company's tract, will be further facilitated, both in time and money.

In a despatch from the Secretary of State for the Colonies, dated 24th October, he requests the Lieutenant-Governor of New Brunswick not to alienate any of the crown lands which are likely to be raised in value in consequence of railways passing through them.

Although her Majesty's Government may be unable for the present to aid in the prosecution of public works in the colonies by guarantee or votes of money, still these observations appear to confirm the course hitherto pursued by this company—namely, to continue the management of the tract on the present system (and upon the most economical principles compatible with the care of it), for some time longer, and probably until the commencement of railways and other public works on the extensive scale projected shall afford a good opportunity for the more rapid disposal of the tract, either in small allotments as hitherto, or by the sale of the whole in one block. It will be satisfactory to the proprietors to learn that the Honourable the House of Assembly granted for 1847 the following aids—viz.: 400*l.* for high roads within the company's territory—a rather liberal grant for bye roads—and 25*l.* in aid of the stage-waggon running between Stanley and Fredericton.

The Legislature also voted 100*l.* in aid of the funds of the York County Agricultural Society; and the directors, feeling that the industry of the settlers ought, for their own benefit and advancement, to be much more steadily directed to cultivation, and much less to lumbering pursuits, had previously authorised Capt. Hayne to offer agricultural prizes to settlers on the company's tract for the season of 1848 and 1849. The total quantity of land sold and granted up to 31st Dec., 1847, amounts altogether to 27,263 acres, leaving 333,154 still remaining. The total cash hitherto received on land sales amounts to 448*l.* 0s. 8d. currency. The amount still due is 417*2l.* 3s. 1d. As the state of the company's funds requires that all expenditure should be curtailed as much as possible, the directors decided in 1847, as they did in the previous year, again to postpone the receipt of the sum of 150*l.* voted by the proprietors, as the annual allowance for their share in the management of the company's affairs.

The directors beg leave further to report, that the following directors and auditor go out of office this day by rotation—viz.: Richard Blanshard, Thomas Butts, Phillip Gowan, George Nicholls, Thomas Newnham, and Newman Smith, Esqrs., directors; and H. Bruce, Esq., auditor—all of whom being re-eligible, offer themselves accordingly.

The CHAIRMAN stated, that he would not occupy the time of the meeting with any observations on the report, which contained a full explanation of the company's affairs for the past year, except to confirm the directors' recommendation to the proprietors, to continue the management, on the present system, for some time longer, with every attention to the strictest economy, in the expectation that the prosecution of public works by the home and provincial Governments, would offer a better occasion for the sale of their tract of land.

Mr. POUNCEY, and other proprietors, deprecated all annual expenditure of capital not absolutely required for the care of the property; and the former suggested, as a better means of fixing the proprietors' attention, from year to year, on their pecuniary affairs, that the directors should give notice (in their circular, appointing the day of the annual meeting), that the London and provincial balance-sheets, for the previous year, were open to inspection for some days before the annual meeting, which was immediately assented to by the directors.—After some discussion the report was adopted.

Mr. POUNCEY, seconded by Mr. HANKEY, proposed, and the proprietors present joined in passing, a unanimous vote of thanks to the directors, for their continued zealous attention to the company's business, particularly as they had declined any remuneration for their services.

The CHAIRMAN replied, on behalf of the board, that the managing proprietors might, as large stockholders themselves, be always depended upon for zealous attention to the strictest economy, and for an attentive consideration also of any suggestions as to improved management, which any proprietor might think fit to communicate to them in writing. (Hear.)

The meeting then adjourned.

PROVIDENT LIFE OFFICE.

The annual general meeting of proprietors of this institution took place at the head office, in Regent-street, on Tuesday last; the attendance was unusually large. The Rev. J. SHERMAN in the chair.

The CHAIRMAN, in addressing the meeting at length, traced the progress of the institution from its first establishment, in the year 1806, when the shareholders subscribed a capital of 25,000*l.* for the purpose of carrying out the infant scheme, up to the present moment; when, having passed through the various stages of its career, to its now vigorous days of manhood, those parties who had confided their interests to its care, saw themselves possessed of a capital of no less than 1,231,647*l.* 14s. 1d. The rev. gentleman remarked, that the shareholders' portion of the profits being less than 1-20th part, the society might almost be considered as a mutual society, in which the profits are wholly divided among the policy holders, but with this advantage, that although 25,000*l.* only had been subscribed, the shareholders guaranteed a capital of 250,000*l.* The present flourishing condition of the society renders the probability of any call being made upon that fund extremely improbable; still it is an additional guarantee for the security of the policy holders, and was, in the outset, the foundation upon which the society started, and without which it would not have gained the confidence of the public. During the period of 40 years, said the rev. gentleman, we have paid in claims no less a sum than 1,677,000*l.*, of which 520,215*l.* was for bonuses, or additions to those sums which, by our policies, we agreed to pay our clients. He dwelt with heartfelt gratification upon the reflection, that the society had, during that time, alleviated the distress of many a widow and orphan, and expressed his fervent hope, that the benefits to be derived from so excellent an institution, would henceforth become still more widely known. This he felt especially anxious should be the case, because they were now met to learn the result of a sixth septennial investigation of their affairs; and the accounts laid before the meeting showed, that the advantages which would be obtained by all persons effecting insurances in the office were of no common description. After providing for all liabilities, a surplus fund of 449,689*l.* 11s. 5d. will be left, one-half of which amount will be divided among those policies already existing in the office; and the other half, 224,844*l.* 15s. 8d., will be reserved as an additional security to the policy holders, until the next septennial division in 1855, when, as upon the present occasion, it will be added to the accruing profits, and form the fund out of which the bonus then to be declared will be paid. The chairman then drew attention to several instances of the extraordinary addition that would be made to existing policies on the present division; in one case, the amount being increased to more than double the sum originally insured. He then took the opportunity of stating to the meeting, that the directors were most anxious to carry out every improvement of which the principles of life insurance were capable; and they had consequently determined, among other important measures, to adopt a new set of tables, calculated upon the more accurate data which the extensive experience of life insurance had lately placed within their reach; and, secondly, to give a prospective bonus, the effect of which will be, that every policy lapsing during the interval between two septennial divisions will participate in the profits up to the time when the life shall fail.

CHARLES WARWICK, Esq., expressed his hearty concurrence in the proceedings of the day. He had not, until recently, entered attentively upon the consideration of the affairs of the office; but he was glad to say, that having done so, he found them in a state of prosperity which far exceeded his expectations. He looked forward with great confidence to the best results arising from the united exertions of the directors and shareholders, and passed a high eulogium upon those gentlemen who had brought the office to its present highly satisfactory condition. He ended a very able speech by calling upon the meeting to join him in the following cordial vote of thanks to the managing directors:—Resolved, "That the most cordial thanks of this meeting be given to J. A Beaumont, Esq., the managing director, for the very great attention and zeal he has displayed in the management of this society; and that this meeting have great pleasure in acknowledging the very satisfactory state of its funds to be mainly attributable to his personal and efficient services." This resolution was unanimously agreed to.

The Hon. ARTHUR KINNAIRD moved a vote of thanks to the chairman, which was carried unanimously.

CHESTER AND HOLYHEAD RAILWAY.

The eighth half-yearly meeting was held at the office, Moorgate-street, on Wednesday last, the 8th inst. Capt. C. R. MOORSOM, R.N., in the chair.

The formal business having been gone through, the SECRETARY read the report, which stated that—

The Conway tube was, on the 6th inst., safely floated between the piers upon which it has to be raised; and the directors are fully assured by the engineer, that within a month, at the utmost, from this time, the tube will be completely fixed in its place, and the trains enabled to pass through it. The bridge has already been subjected to a test, greatly exceeding any that it can ever be put to in its ordinary use. The tube, after having been suspended upon temporary piers, 400 ft. a part, which is the full span of the bridge, was loaded with a weight of 300 tons, when the result was in every way most satisfactory. With the load of 300 tons, the deflexion was only 3 in., or 1 in. to each 100 tons; and from that deflexion it completely recovered itself upon the weight being removed, after having remained therein for three entire days. The requisite arrangements for the opening of the line are now completed—and, aided by the co-operation of the London and North-Western Company, the directors trust that they have succeeded in providing an efficient staff; and, while they propose to establish such rates of fares, and accommodation to the public, as will give full encouragement to the development of the traffic, they have kept in view a due regard to economy in the management. By the 1st of May the line through Anglesea might also be made ready for traffic, so as to furnish railway communication for the entire distance to Holyhead, with the exception of the passage across the Menai Straits. The directors have offered to undertake the whole of the mail service between Chester and Holyhead, by covering the gap in the line with proper horse conveyance, pending the junction between the two sides of the Straits, provided the contract entered into by the Treasury with the company be at once acted upon; or to carry the mails by that time, provided the company were allowed an adequate remuneration for so doing. In the event of this offer being entertained, the directors consider that it would not be expedient to accelerate the opening through Anglesea, until the whole line from Chester to Holyhead can be made continuous, by the completion of the line across the Straits, or at least until the most efficient steam-boat accommodation can be afforded.

That it is comparatively of little importance to the company whether the contract with the Treasury shall commence at once, or is deferred for a short time, as its continuance is for a fixed term of years; and, therefore, the earlier its commencement the earlier will be its termination. That the extension of the line at Holyhead will not be proceeded with at present, until the works of the new refuge harbour have made further progress. It has been intimated to the directors that the temporary accommodation making in the old harbour at Holyhead will be sufficiently advanced to enable the Government new packets to use it. In accordance with the resolutions come to by the shareholders, application has again been made to Parliament for the necessary powers to connect the steam-boat proprietorship with that of the railway, so far as is necessary to complete the communication between Holyhead and Dublin, and the directors feel the greatest confidence that their renewed application will be successful. With this protection and security to the public and the company, the directors have the most entire confidence in the traffic of the line realising the fullest expectation that has been formed of it. That the time and attention of the engineer, Mr. R. Stephenson, have been so unremittingly devoted to the floating and raising the Conway tube as to prevent him furnishing his usual report.—The accounts to the 29th Feb. showed, that the amount authorised to be raised was 3,363,332*l.*; that 2,790,067*l.* had been received, and 2,751,792*l.* expended—leaving a balance of 38,276*l.* at the bankers and on loan.

The CHAIRMAN apologised for the absence of the deputy-chairman, who, he said, felt a great interest in the progress of the undertaking, and was then on the line at the Conway-bridge. Mr. R. Stephenson has determined to remain there until the tubular girder was raised and fixed in its place. After some further observations, he moved the adoption of the report, which was seconded.

Mr. LEICHWORTH said, he thought that the engineer might have spared an hour to have written his report. He feared there was something behind which it was more convenient to keep back; at all events, he thought if they could not have his presence, they ought to have his report. He observed, that their shares were at 20*l.* discount, and that was no surprise to him, because at the meeting last August they were told, that the line would be opened in three months. He gave the directors great credit, for the clear manner in which the accounts were laid before them. He noticed, that of the 42,000 5 per cent. preference shares, only 29,575 had been issued, although they had been at a small premium. Some time ago, he inquired at the office, to know whether there were any to be disposed of; he was told by the clerk that there were none to be had. It was clear that statement was incorrect; he would not have complained, if he had been told that he should have them at the premium in the market. He thought the items in the account, referring to charges for resident director, secretary, office expenses, directors, and auditors, making 15,890*l.*, were very high. With regard to the Britannia-bridge, he wished to know whether the problem had yet to be solved for that, and whether it was to be constructed on the same principle as the Conway-bridge?

The CHAIRMAN said it was; but the tubes for the Britannia-bridge would be 60 feet longer, and that they could be made proportionably stronger. It would, of course, require more time to raise four tubes than two. He could assure the hon. proprietor, that there was nothing to keep behind with regard to the engineer's report. Mr. Stephenson had so exclusively devoted himself to the getting up of the tube, that he could not attend to anything else. He (Mr. Stephenson) had requested him, when standing beside him on the tube as it floated down to the piers, to apologise to the meeting for the absence of the report. The engineer's report was expected in a few days, and a copy would be forwarded to the proprietors, together with the directors' report. He frankly acknowleged that the directors were mistaken with respect to the time of opening the line; there were so many contingencies to contend with; although every exertion had been made. The materials for the tube had to be supplied from half-a-dozen places, and they could not be brought to the spot at the exact moment they were wanted; and by sea, it was well known, a ship might be delayed a week or six weeks before she could arrive. With respect to the items of expenditure alluded to, he (the chairman) should be surprised, however high they might seem, if they were not less than those of other companies. He then explained that the 10,000 shares were not in the office at the time the hon. proprietor made the inquiry; they were placed in the hands of parties to be disposed of.

Mr. E. TAYLOR said, he thought that, in the absence of the engineer's report, they ought to have some information with respect to the line. It was stated in the directors' report, that the line might be opened on the 1st of May, although 48 miles were made six months ago. He wished to know, whether interest on calls would be allowed up to the date of opening the line?

The CHAIRMAN replied that it would. With respect to the line, there was only one tube ready for the Conway-bridge; and, when fixed in its place, the whole line would be opened from Chester to Bangor. The Britannia-bridge, to cross the Menai Straits, would require four tubes, 460 ft. in length, and, in addition, four other tubes, to give them stiffness. After the contingencies they had experienced at the Conway-bridge, he would not pledge himself as to the exact period of opening the line throughout, but he would pledge himself that nothing should be left undone by the engineer and directors to forward the completion of the works. He had no doubt the line would be opened to Bangor in a month. The line was completed to Conway, and he knew of no impediment to open it to Bangor at the time mentioned.

In answer to a question, the CHAIRMAN stated, that the London and North-Western Company had agreed to work the line at so much per mile per load, and so much per carriage, for a period of five years, to be terminated by either party giving three years' notice. He understood, that the agreement was an advantageous one for this company.

Mr. KING (the secretary) explained, in answer to a question, that the arrears on the 31st of December last amounted to 70,000*l.*, and that 40,000*l.* had been since received, up to the 29th of February, leaving 30,000*l.* then in arrear.

The report was then adopted, and the forfeiture of 61 shares, upon which no calls had been paid, was confirmed.

At the special meeting the bill was approved of, for authorising the company to purchase and hire steam-boats, and to raise 250,000*l.* for the purpose.

A vote of thanks was passed to chairman and directors, when the meeting separated.

RAISING THE GREAT TUBULAR BRIDGE AT CONWAY.

In sight of a large concourse of people, from all parts of the country, covering the whole space of the suspension-bridge, the towers and walls of the ancient and magnificent castle, and the fields in the back-ground of the spot on which it was built, the wonderful effort of science, the design of Mr. Robert Stephenson, the tube bridge, was floated at about 11 a.m., on Monday, the 6th of March, and moved from the piles and stays on which it was constructed, and fairly brought into the tideway of the Conway, while its flood-tide was running at the rate of at least 2 miles per hour. It appeared to float with the greatest ease, and not submersing the 6 pontoons on which it rested (three at either end) to within at least 3 ft. of their decks. The precautions taken by Captain Claxton, R.N., to whose sole direction the transporting of this enormous mass was committed, were admirably contrived to keep the machine suspended over its fixed piers, to await, as it were, the decision of the engineer as to whether the perilous step of launching into the deep (for deep indeed is the river, 12 fms. at low water) should be proceeded with; or whether the valves should be lifted, and the tube dropped, as it were, again in place, upon its piers, many circumstances appearing to bear upon that determination—the strength of the current, the height to which the tide promised by its comparative rising, and the strength of the wind. At about 11 o'clock, however, the tide appeared to slack, and the resolution to be formed, for all at once the chains and ropes were hove upon, and in 10 minutes it had passed the first rubicon—gradually, but steadily, it approached the site intended for it. We saw Mr. Stephenson and Mr. Brunel actively engaged with Captain Claxton, who, with his trumpet in hand, directed the proceedings. We observed him using two figures, of large dimensions, No. 1 and No. 2—when the red side was shown of the former number, a capstan, fixed on the road from Conway to the tube-works, was now upon; when the white side was shown, the heaving stopped, and a similar operation with No. 2 governed the operations of a powerful capstan (we were told lent by the Admiralty), fixed on the railway, on the Chester side, with its rope made fast to the inside of the tube on that end. In the pontoons, three enormous masses of timber, we were informed, 95 ft. long by 25 ft. wide, and 8 ft. deep, bound together by powerful crabs, worked by 44 men, hove upon the chains, which had previously been tightened up by a large crab, at which a dozen or more men strained with their utmost efforts at either end on shore—one end of each chain being fixed at the piers of the suspension-bridge, while the other ends were fast to the aforesaid crabs, on the opposite side of the river; on these chains the pontoons appeared to traverse. The western, or Conway end, was pointed first, but did not come quite home afterwards. The eastern, or Chester end, was dropt in after, or while the ebb was making, but before it reached, by about a dozen feet, the exact berth, it took the mason work, and no effort could disengage it. Nevertheless, it was over its bed, sufficiently to be landed and bedded up with timber previously prepared from a lower bed, which had been provided in case the tide should fall before the upper bed could be reached. The most extraordinary efforts were made, with screws and tackles, no less than 4 of which latter were at one time applied, besides the Chester side crab, manned by 60 people, while the tide was falling, to overcome the obstacle; but they appeared to be ineffectual, and Captain Claxton was heard to give orders for bedding up, which was speedily accomplished. The barges were then sunk a little, and the noble fabric rested very near the hydraulic presses which are to be used in raising it. Standing on the top were Messrs. George and Robert Stephenson, Mr. Brunel, Mr. Rendel, Mr. Fairbairn, Mr. Bidder, Mr. Frank Foster, Captain Claxton, Captain Moorsom, and the contractor, Mr. Evans. Cheers were then given for the Conway Railway bridge, for Mr. Stephenson, and for Captain Claxton; and heartily responded to by the masses lining the suspension-bridge and the castle walls. Three steamers were in attendance below the bridge, two full of company, and a great number of boats piled with their freights on the river. A band of music, playing martial and enlivening airs, followed by a dense crowd, marched from one end to the other on the top of the tube, which was but slightly thinned before sunset. The way in which, in a tideway never really still, this enormous structure was placed upon its bed, reflects the greatest credit on all concerned, down to the lowest labourers. All seemed to be excited and actuated by the liveliest desire for success. We were told that 80 men were in each set of pontoons—one set commanded by Captain Dunce, R.N., an assistant of Mr. Brunel, and the other set by Lieutenant Blatchley, R.N.; the crews under them, performing the principal work, being sailors from the Home of Liverpool, of whose admirable conduct in Conway we heard high encomiums. In the tube, attending the hawsers, were the officers and some of the crew of the *Great Britain*, but recently raised in and released from Dundrum Bay. On the top, on the Conway side, the eminent manufacturer and experimenter on tubes, Mr. Fairbairn, of Manchester, had the direction; and, on the Chester side, Lieut. Glenny, R.N. The great difficulty to be overcome was apparent—the small space to play in; for, on the Conway side, it wants 9 in., by actual admeasurement of our correspondent, of being home, or in place; while, on the Chester side, it is fairly jambed against the masonry, so that, in fact, there were barely 9 in. free in 400 ft. No sooner had the tide fallen sufficiently than the obstacle to the exact fixing in position became apparent to all. The inner pontoon was butting at its end against and partly upon a rock. It took the ground which had been blasted away from the solid rock—in consequence of having got a little twisted previously to starting, we were assured, full 4 ft.

Conway has seldom witnessed such a scene as that of this day. The little town is filled to overflowing, and the 500 labourers and others, who were employed in the operation of navigating the tube, are keeping it up even to-day.

The tube, which is 430 ft. clear span, by 18 ft. broad, 20 ft. arch at abutments, 25 ft. at centre, and weighing 1500 tons, we understand, will be placed, and the lifting process commenced, before the springs now are taken off, and that in about a fortnight it will be some 20 ft. above its present position, for the trains to pass. It has already been tested with 300 tons in its centre. The Menai tubes are progressing, under the superintendence of Mr. Edwin Clark, assistant to Mr. Stephenson, who most unfortunately lost the great toe of his right foot one day last week. The second Conway tube is in progress.

LIABILITY OF DIRECTORS AND SHAREHOLDERS.

COURT OF BANKRUPTCY, MARCH 7.

IN THE BANKRUPTCY OF W. C. STREATFIELD.—The bankrupt was one of the directors in the General Maritime Assurance Company, in Cornhill. This was a meeting for the choice of assignees, and proof of debts. Mr. Streatfield resided at East Ham, and was a magistrate for Essex. An important question was raised upon a proof tendered by Mr. Beddome, on behalf of Messrs. Drue and Culliford—namely, to what extent the director, shareholder, and partner in a company is liable for the debts of such company. The same question was raised in the case of Mr. Dawson, who also sought to prove a claim of 30*6l.*

Mr. Streatfield has become a bankrupt on his own petition, and the creditors of the General Maritime Assurance Company seek to prove against any surplus which may remain of his private estate after his private creditors had been satisfied. Mr. Norton tendered a claim on behalf of Mr. Dawson for 200*l.*, being the amount of a policy of assurance effected with the above-mentioned company.

The claim was resisted by Mr. LAWRANCE, as solicitor to the fiat, who contended that the proof was not admissible. His first objection to it was that, although the instrument was signed by three of the directors, it was not signed by the bankrupt, who, according to his interpretation of the 35th George III., c. 63, s. 11, could only be held liable where the subscriber's or underwriter's name was described, expressed, or specified. His next objection was, that according to the same statute the capital or funds of the shareholders of the company could be alone made available to meet the debts of the company; the capital of this company was put forward as 1,000,000*l.*, and the assumption was, that the bankrupt had paid up a fair proportion on the shares which he held. The learned gentleman quoted the case of Andrews *v.* Ellison, 6 Moore, p. 199, in support of his argument.

Mr. NORTON contended, that to the extent of the shares which he held, the bankrupt's private estate was liable for the debts of the company of which he was a member. In fact, the bankrupt's share of the capital, 30,000*l.*, had never been paid up, and he was clearly liable upon that deficiency. As to what had been said about the statute requiring the name of the underwriter or subscriber to be affixed to the instrument, he apprehended the objection could not be entertained. The instrument was signed by three directors of that company, of which the bankrupt was also a director, and the initials of the bankrupt's name were on the back of the deed, as having examined it. The case of Andrews *v.* Ellison did not apply, for in that case there were funds in the company to be distributed—in this case there were none. It was upon the faith of such names as those of the bankrupt's, that the public were induced to place their moneys in the hands of these companies; and it would be most unjust to free the members of them from liability, at least, in a case like this, where the company possessed no funds, and where the director had not paid up his share of the capital.

Mr. BEDDOME put forward the proof of Messrs. Drue and Culliford for 6000*l.*, being of a similar nature to that of Mr. Dawson. The objection urged by Mr. Lawrance against the former proof did not apply to this, for Mr. Streatfield's name was affixed to the instrument.—Mr. LAWRANCE having been heard against the admission of the proof,

The COMMISSIONER said, he would first deal with the case of Messrs. Drue and Culliford, in which the question arose, as to what extent the bankrupt was liable upon a policy of insurance to which his name was affixed. Mr. Lawrance had stated that, as there were no funds in the company, the bankrupt was not liable, for he was only amenable to the extent of those funds, and he quoted the case of Andrews *v.* Ellison, in support of his opinion. He (the Commissioner) held that that case did not apply here. The meaning of the contract, in his opinion was, that the liability was not limited to the funds which the company might have in hand, but to the amount of the several shares held by the different individuals who composed the company. In accordance with this opinion, he maintained that, as the bankrupt had not paid up to the full amount of his shares, he was liable for that deficiency. As regarded the claim of Mr. Dawson, he would take time to consider his decision: the statute (35 George III.) seemed strict as to the necessity of the name of the underwriter being affixed; but he had no hesitation in saying, that he would construe that statute in as favourable a manner as it would bear towards the claimants.

The proof of Messrs. Drue and Culliford was then admitted, that of Mr. Dawson stands over. Mr. Lawrance stated, that he had made these objections as solicitor to the fiat, and contrary to the wishes of the bankrupt. Mr. F. Reynolds, of St. Mildred's-court, merchant, was chosen assignee.

LAND IN ENGLAND.—The whole area of England is equal to 50,357 square miles, or 32,247,680 statute acres: thus divided—arable land, 13,252,000; pasture, 12,380,000; and uncultivated, 6,615,680 = 32,247,680 acres.

ASSAYING AND ANALYSIS.—Mr. MITCHELL begs to inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY,
23, *HAWLEY-ROAD, KENTISH TOWN, LONDON*, 36
to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

FLEXIBLE HOSE-PIPES FOR LOCOMOTIVE ENGINES,
RAILWAY CRANES, FIRE-ENGINES, GAS, &c.
PATENT VULCANISED INDIA-RUBBER HOSE-PIPES AND TUBING OF EVERY DESCRIPTION. 37
These pipes are made to stand hot-water without injury—are very superior to leather pipes, or the common India-rubber pipes; and, as they do not become hard or stiff in the lowest temperatures, or require any application when out of use, are particularly well adapted for fire-engines.
FLEXIBLE TUBING, of every description, for gas, chemical purposes, &c.
VULCANISED INDIA-RUBBER WASHERS, all sizes, for steam and hot-water joints, &c.—Sole manufacturer, JAMES LYNE HANCOCK,
Goswell Mews, Goswell-road, London.

LOWE'S PATENT SCREW PROPELLER—NOTICE.
COURT OF QUEEN'S BENCH—FEB. 23 AND 24.
Before Lord Chief Justice DENMAN and a Special Jury. 38
This action was first tried in Dec., 1844, and a verdict found for the plaintiff upon all the counts; was again brought before the Court of Queen's Bench on Wednesday, the 23d February, when, after a trial of two days, the jury again found a VERDICT for the PLAINTIFF, with DAMAGES.—March 1, 1848.

LOWE'S PATENT SCREW PROPELLER.—The Owners of all vessels fitted with Mr. LOWE'S PATENT PROPELLER of CURVED BLADES, now in general use on her Majesty's Navy and commercial marine, are requested to take out LICENSES for the use of it.
Mr. JAMES LOWE is the ONLY PATENTEE of the above-named PROPELLER of CURVED BLADES, and all persons infringing the patent will be made accountable by legal process, which will thereby subject them to pay triple costs of the action.
Application for licenses to be made at the Propeller Offices, 19, Tooley-street, London-bridge. EDWARD JENKIN, Secretary.

NATIONAL DISINFECTED AND DRY MANURE COMPANY.
OFFICES—No. 7, BANK CHAMBERS, LOTHBURY.
[REGISTERED PROVISIONALLY.]
Capital £200,000, in 20,000 shares, of £10 each.—Deposit £1 per share.
No call will exceed 5s. per share, and the liability of shareholders will be limited to the amount of their respective shares.
PROVISIONAL COMMITTEE.
GERARD BARRY, M.D., Charles-street, St. James's-square. 39
JAMES ORGILL, Esq., 11, Old-square, Birmingham.
JOSHUA E. COOPER, Esq., West Ham, Sussex.
BANKERS—Messrs. Spooner, Atwoods, and Co.
The object of this company is to collect the animal and vegetable refuse of large and populous towns, and subsequently to convert them into a dry, inodorous, and portable manure.
By the company's process all decomposed substances, whether animal or vegetable, liquid or otherwise, may be rapidly converted into a scentless manure—rich in every fertilising quality, and abounding in vegetable stimulant.
A manure, somewhat similar, has for some time been manufactured by a prosperous company in Paris, under the commercial firm of "Baronnet and Co." The last report states, that "crops were obtained incomparably finer, and more abundant, than by the use of any other manure."
The cost of preparation is trivial, in comparison with any of the present methods of dressing. The committee, therefore, have no hesitation in affirming, that the profits will realise the most sanguine expectations of shareholders.
The operations of the company will commence in the town of Birmingham. Samples of the manure may be seen at the offices. JAMES H. KENWORTHY, Sec.

NATIONAL DISINFECTED AND DRY MANURE COMPANY.—Notice is hereby given, that the ALLOTMENT of SHARES in this COMPANY is being proceeded with, and that the LETTERS will be ISSUED in the course of a few days. JAMES H. KENWORTHY, Secretary. 40

SNYDER'S PATENT LEATHER COMPANY.
(Provisionally Registered, pursuant to the Act 7 and 8 Vic., cap. 110.)
Capital £60,000, in 12,000 shares, of £5 each.—Deposit 10s. per share.—No call to exceed 10s. per share, nor at intervals of less than three months.
CHAIRMAN—JOHN GARDNER, Esq., M.D., 51, Mortimer-street, Cavendish-square.
PROVISIONAL DIRECTORS.
G. W. BLANCH, Esq., 3, Albion-place, Blackfriars-road.
H. ENGLISH, Esq., 25, Fleet-street.
W. PEARSE, Esq., High-street, Exeter.
THOMAS PORTER, Esq., City-terrace, City-road. 41
W. SHEARMAN, Esq., 12, Green-street, Ardwick, Manchester.
JOSEPH SMITH, Esq., Parkfield, Rusholme, Manchester.
W. STAGG, Esq., Green-park, Manchester.
J. TRUSCOTT, Esq., Hemmingford Villas West, Barnsbury-park, Islington.
D. L. WILLIAMS, Esq., 6, Edwards-square, Kensington.
W. M. WILLIAMS, Esq., 17, Wilmot-street, Brunswick-square.
BANKERS—The Commercial Bank of London, Lothbury.
SOLICITOR—E. MOSS, Esq.—SECRETARY—Mr. E. W. Fenton.
OFFICES—TEMPLE CHAMBERS, FLEET-STREET.
This company has been formed to carry into effect an improvement in the art of tanning, by which leather is rendered not only superior in quality, but is produced at a lower price, and more uniform in texture, than by any process hitherto known.
A patent having been granted to Mr. Snyder for his improvements in tanning, the rights of the patentee have been secured, on advantageous terms, as also his services in carrying out the operations of the company.
From estimates which have been carefully gone into, and which can be inspected on application at the offices of the company, a large return on the capital employed will be obtained, even to the extent of 100 per cent. per annum.
This estimate may appear to show profits so far beyond the ordinary result of trade as to call for explanation. Snyder's patent effects a saving of—1. Half the time in tanning; 2. 12 or 15 per cent. of skin or hide—*i. e.*, the leather produced weighs so much more; 3. A saving of 10 per cent. of tan; and 4. The production of a superior article. In this respect Snyder's Leather will compete with the best French Leather.
Prospectuses, with every information, will be afforded on application to E. Moss, Esq., solicitor, 4, Queen-street, Cheapside; or to the secretary, at the offices of the company, to whom applications for shares are to be addressed.
The directors beg to claim the attention of the public to their arrangements, which, they trust, will be found to secure the interest of subscribers, without incurring any of those evils not unfrequently attendant upon such enterprises.

THE MINERS' LIFE PRESERVER.

SIR,—Having myself seen the paragraph in the Journal respecting the invention of a machine at Liege, by a M. Jouquet, I thought to have shown you that a priority of claim existed in Walsall. In the interim, I am surprised that another exists, as in the Journal of Saturday last. You will perceive by the enclosed, that such a machine has not only been invented, but means taken to make it known to the public. The inventor, an humble individual, having been to all the principal mining districts in England, at greater expense than he could at all afford, has not yet had one offer to put it in operation, though all who have seen it are convinced of its great utility. Now, Sir, remains the question—how it is that no means are used to prevent the loss of life among a most useful class of society?—how is that yours and other columns are weekly occupied with harrowing details of loss of life in mines, and as yet, apparently, no means taken (or at least effectual ones) to prevent the recurrence of such awfully destructive accidents? As many connected with mines will, no doubt, read this (if you deem it worth insertion in your widely-circulated and valuable Journal), they will, probably, have a sufficient answer to give—INQUIRER.

P.S.—I ought to have added, that the inventor of the enclosed was totally unacquainted with any other previous machinery for effecting the same purpose.

[In justice to the ingenious inventor, we subjoin the description of the apparatus, with the important testimonial of Messrs. Bagnall and Sons. Mr. Yates is not the only man who has had to encounter the apathy and neglect of the class for whose benefit his ingenuity has been exercised.]

THE MINERS' LIFE PRESERVER.—The frequent and fatal accidents occurring in mining districts, from various causes, have long engaged the consideration and awakened the sympathy of the public; and, perhaps, the most prolific source of sudden and violent death, is the fearful precipitation of the men into the "depths of the earth," by the breakage of rope, chain, or other tackle, whilst ascending or descending the pits. The most praiseworthy attention has been given by engineers and others to this deeply-interesting subject, and many great improvements have been thereby introduced into the formation and workmanship of ropes, chains, &c. Still, however, the *liability* to breakage exists; and where the rupture of a *single* link or cord does take place, loss of life, or dreadful mutilation of the human frame, is almost always the result. Shortly after one of these distressing events, which about two years ago terminated the lives of 12 individuals in South Wales, an ingenious mechanic (a locksmith) turned his thoughts to the subject, in the hope of effecting a remedy for so awful a calamity, and thereby preserving the lives of his fellow-creatures. He persevered through many difficulties, and perfected a model of a pit, with a simple apparatus attached to the skip, which justified the expectation that his benevolent intentions would be fully realised. He was enabled to submit his invention to the highly-respectable firm of Messrs. John Bagnall and Sons, of West Bromwich, who kindly fostered his endeavours, by allowing him the use of an old pit at Bentley Works, to try his experiment on a full working scale, and also afforded him every assistance in the use of men and materials. The principle proved equally successful in the working pit as in the small model, and on the severance of the rope (which was repeated many times) the skip immediately stayed in its progress, and with its contents remained *an uninjured fixture* in the spot where the rope left it! Indeed, it only requires the breaking of the rope or chain to bring into *instantaneous* action the safety apparatus; that done, the skip and its contents are safe. The machinery is exceedingly simple, and not liable to be out of repair, and may be easily applied to pits already in use. The inventor, Stephen Yates, of Walsall, having spent much time in carrying out his object, is desirous of making his invention public, only to secure to himself such remuneration as shall refund him for his outlay, freely giving (beyond that) his philanthropic efforts for the benefit of his country.—"*Gold's Hill Iron-Works, West Bromwich, Sept. 25, 1841.*—We have seen Mr. Stephen Yates's apparatus, called the 'Miners' Life Preserver,' which we think simple, ingenious, and calculated to answer the purpose desired, and consider it applicable to pits generally.—(Signed)—JOHN BAGNALL and SONS."—*Birmingham Journal.*

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.
THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY 42
BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th; and from Suez on or about the 10th of every month.
For rates of passage-money, plans of the steamers, and to secure passages, apply at the company's offices, 3d, St. Mary Axe, London.

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"It was also remarked, that most of the fractures, in breaking, presented a *regularity of grain* throughout, resembling the structure of *unhardened steel*."
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Dated June 22, 1847. *Near NEATH, SOUTH WALES.*

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DIXON AND BUDD'S PATENTS.
Apply for particulars, or to inspect the process in operation on six blast-furnaces, to J. Palmer Budd, Esq., Ystalyfera Iron-Works, near Neath. 44
Dated June 22, 1847.

FOURDRINIER'S PATENT SAFETY APPARATUS, for THE PREVENTING ACCIDENTS IN MINES AND OTHER PLACES, WHEN THE ROPE OR CHAIN BREAKS.
By the ADOPTION of this INVENTION the LIVES of the WORKING MINERS may be PRESERVED, and the PROPERTY of the MINE OWNERS PROTECTED from the serious consequences of either of the following accidents—viz.: 45
1. From the men, or the load, being precipitated to the bottom of the shaft when the rope or chain breaks: in this case the apparatus is *self-acting*.
2. From either the men, or load, being drawn over the pulley: in this case, also, the apparatus is *self-acting*.
3. From the fearful consequences to men or load of a "whirl," or run: in this case the result is equally *certain*.
A COAL PIT, with the SAFETY APPARATUS ATTACHED to the CAGE, is daily at WORK near BURSLEM, in the STAFFORDSHIRE POTTERIES.
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(Provisionally Registered, pursuant to the 7th and 8th Victoria.)
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Tenders to be addressed to this office, giving full name and address of lender. 47
D. RANKINE, Treasurer.
Caledonian Railway Office, Edinburgh, Feb. 25, 1848.

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IMPORTANT TO RAILWAY AND STEAM NAVIGATION COMPANIES, MANUFACTURERS, AND ENGINEERS.
W. BROTHERTON AND CO.'S 50
PATENT LUBRICATING FLUID (or Animal Oil) FOR ALL DESCRIPTIONS OF MACHINERY.
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TUBES FOR STEAM, GAS, AND OTHER PURPOSES,
ALL SORTS OF GAS FITTINGS. 51
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CAPSTAN, AND RIDING BITS COMPANY.
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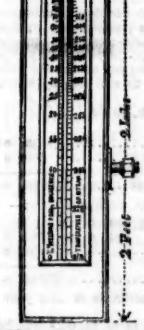

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			1840	116 7 6	54 0 10	7 18 10	296 13 4
			1841	111 6 8	49 10 0	7 10 4	247 4 5

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